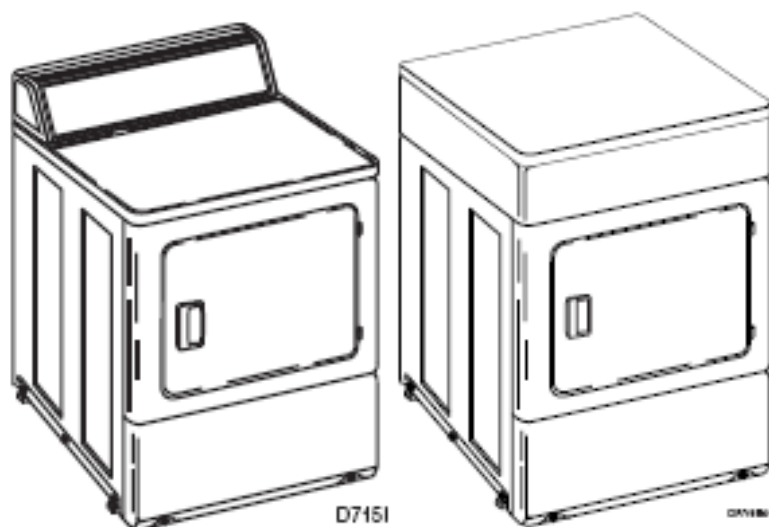


PROFESSIONAL TUMBLE DRYER

8,5kg



SERVICE MANUAL

505894R2
Publication date: March 2012

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Section 1

Safety Information

Throughout this manual and on machine decals, you will find precautionary statements (“CAUTION,” “WARNING” and “DANGER”) followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

DANGER

Danger indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.

WARNING

Warning indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.

CAUTION

Caution indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.

Additional precautionary statements (“IMPORTANT” and “NOTE”) are followed by specific instructions.


IMPORTANT

The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE

The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

In the interest of safety, some general precautions relating to the operation of this machine follow.

	WARNING
<ul style="list-style-type: none">• Failure to install, maintain, and/or operate this machine according to the manufacturer’s instructions may result in conditions which can produce serious injury, death and/or property damage.• Do not repair or replace any part of the machine or attempt any servicing unless specifically recommended or published in this Service Manual and that you understand and have the skills to carry out.• Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the machine is properly grounded and to reduce the risk of fire, electric shock, serious injury, or death.	
<small>W284</small>	



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1



WARNING

Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly or adjustments subjecting you, or the inexperienced person making such repairs, to the risk of serious injury, electrical shock, or death.

W007



WARNING

If you or an unqualified person perform service on your machine, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.

W286

NOTE: The **WARNINGS** and **IMPORTANT INSTRUCTIONS** appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining or operating the machine.

Always contact your dealer, distributor, service agent or the manufacturer about any problems or conditions you do not understand.

Locating an Authorized Servicer

Manufacturer is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, manufacturer also recommends contacting an authorized technician and using authorized factory parts.

Section 2

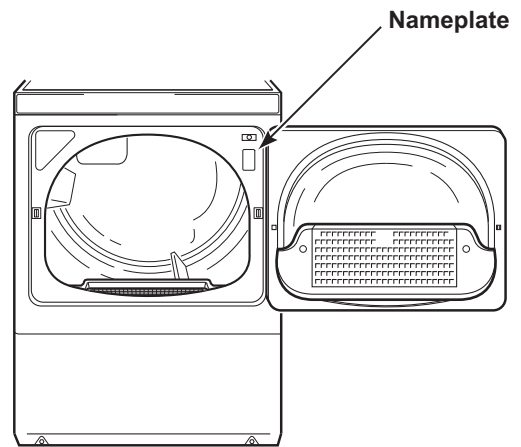
Introduction

Customer Service

If literature or replacement parts are required, contact the source from whom the machine was purchased.

Nameplate Location

When calling or writing about your product, be sure to mention model and serial numbers. Model and serial numbers are located on nameplate(s) as shown.



D412PE1A

Section 2 Introduction

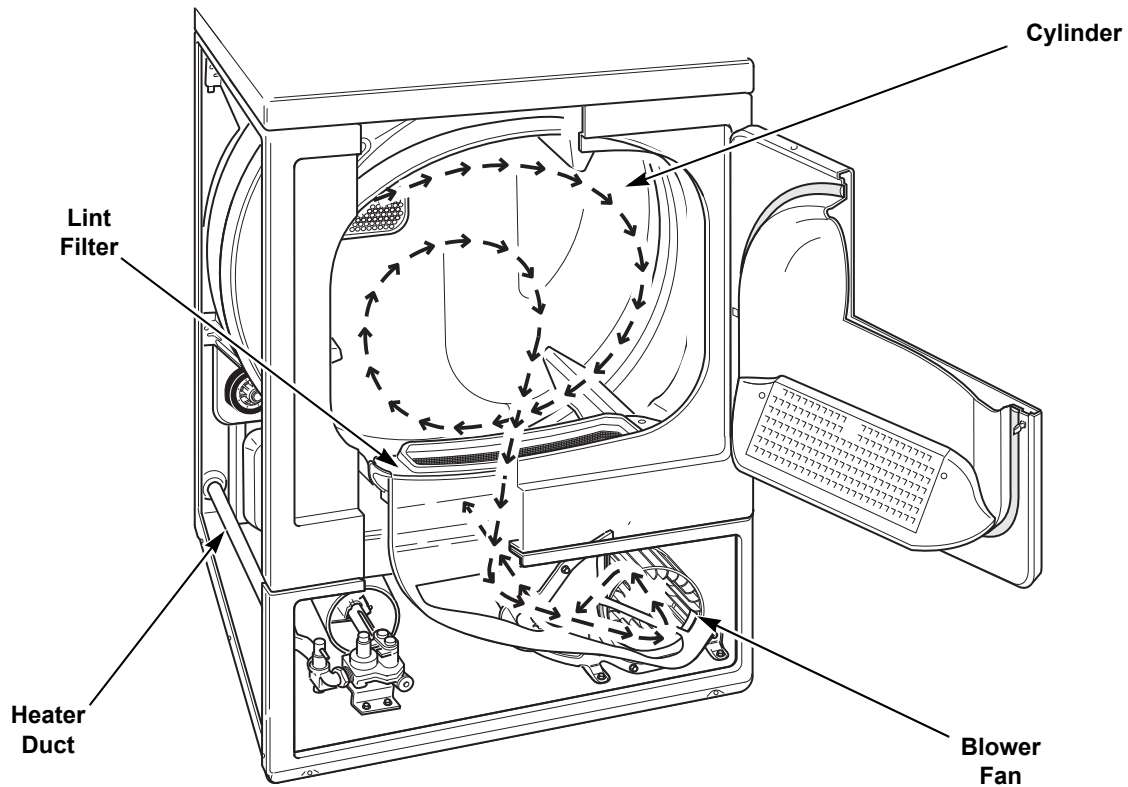
Model Identification

Information in this manual is applicable to these dryers:

ADE3TFWS431AW01	LDE3TRWS331TW05	LEZ27A*F1702	LGS38A*M3013
ADE3TRWS431AW01	LDG3TRWS111TW05	LEZ27A*G3018	LGS38A*M3020
ADE3TRWS431NW22	LEB07A*F1709	LEZ27A*G4018	LGS40A*M3020
ADE32FSS431AN01	LED17A*F1700	LEZ37A*F1702	LGT57A*F1100
ADE32FSS431NN22	LEG37A*F4350	LEZ37A*F3000	LGT68A*F1100
ADE32FSS541RN01	LEH37A*F3300	LEZ37A*G3018	LGY47A*F1109
ADE41FSS171TN03	LEK37A*F4350	LEZ37A*G4018	LGZ27A*F1102
ADG3TFWS301AW01	LEN27A*G3008	LEZ37A*G5618	LGZ27A*M3013
ADG3TRWS301AW01	LEN27A*G3018	LEZ57A*F1702	LGZ37A*F1102
ADG32FSS301AN01	LEN27A*G4008	LEZ67A*F1702	LGZ37A*F3000
ADG41FSS111TN03	LEN27A*G4018	LGG37A*F3058	LGZ37A*G3013
AEZ17A*F1702	LEN27A*G99M3	LGH37A*F1182	LGZ37A*M3013
AEZ28A*F1702	LEN37A*G3018	LGH37A*F5423	LGZ57A*F1102
AEZ68A*F1702	LEN37A*G4018	L GK37A*F3058	LGZ67A*F1102
AGZ17A*F1102	LES17A*F3000	L GK37A*F3060	MDE3TRWS331TW06
AGZ28A*F1102	LES17A*F3007	LGN27A*M3008	MDG3TRWS111TW06
AGZ68A*F1102	LES17A*F3022	LGN27A*M3013	ZDE30RGS171CW01
BDE30FGS171CW01	LES17A*F4500	LGN37A*M3013	ZDE3LRGS171CW01
BDG30FGS111CW01	LES17A*M4588	LGS17A*F3020	ZDE41FSS171CN01
CDE3LRGS171CW01	LES27A*G3018	LGS17A*F3081	ZDE4BFGS171CW01
CDE4BFGS171CW01	LES27A*G4000	LGS17A*K1180	ZDE4BRGS171CW01
CDG3LRGS111CW01	LES27A*G4500	LGS17A*M3020	ZDG30RGS111CW01
CDG4BFGS111CW01	LES27A*G4518	LGS17A*M3082	ZDG3LRGS111CW01
CEZ68A*F1702	LES27A*G4018	LGS27A*M3013	ZDG41FSS111CN01
CGZ68A*F1102	LES28A*G4018	LGS27A*M3080	ZDG4BFGS111CW01
FDE3TRGS401NW22	LES33A*F4562	LGS37A*F3000	ZDG4BRGS111CW01
FEN16A*G4018	LES37A*F3000	LGS37A*F3022	
FEN17A*G3018	LES37A*F3028	LGS37A*F3028	
FEN17A*G4018	LES37A*F3300	LGS37A*F3058	
FES16A*G4018	LES37A*F3327	LGS37A*F3060	
FES17A*F3300	LES37A*F4350	LGS37A*F3080	
FES17A*F4350	LES37A*F5412	LGS37A*F5412	
FEU17A*F1702	LES37A*G3018	LGS37A*F5423	
FEZ17A*F1702	LES37A*G4018	LGS37A*G3013	
FGN16A*M3013	LET57A*F1700	LGS37A*G3080	
FGN17A*M3013	LET67A*F1700	LGS37A*M3013	
FGS17A*F3060	LET68A*F1700	LGS37A*M3080	
FGZ17A*F1102	LEY47A*F1709		

* Add Letter To Designate Color. L – Almond W – White Q – Bisque G – Gray

How Your Dryer Works



DRY1819S

The dryer uses heated air to dry loads of laundry. When the motor is started, the exhaust fan pulls room temperature air in through louvers at the rear of the dryer and over the heat source (burner flame for gas and heating element for electric). The heated air moves through the heater duct and into the cylinder, where it circulates through the wet load. The air then passes through the lint filter, air duct, and exhaust fan, where it is vented to the outdoors.

Section 3

Troubleshooting



WARNING

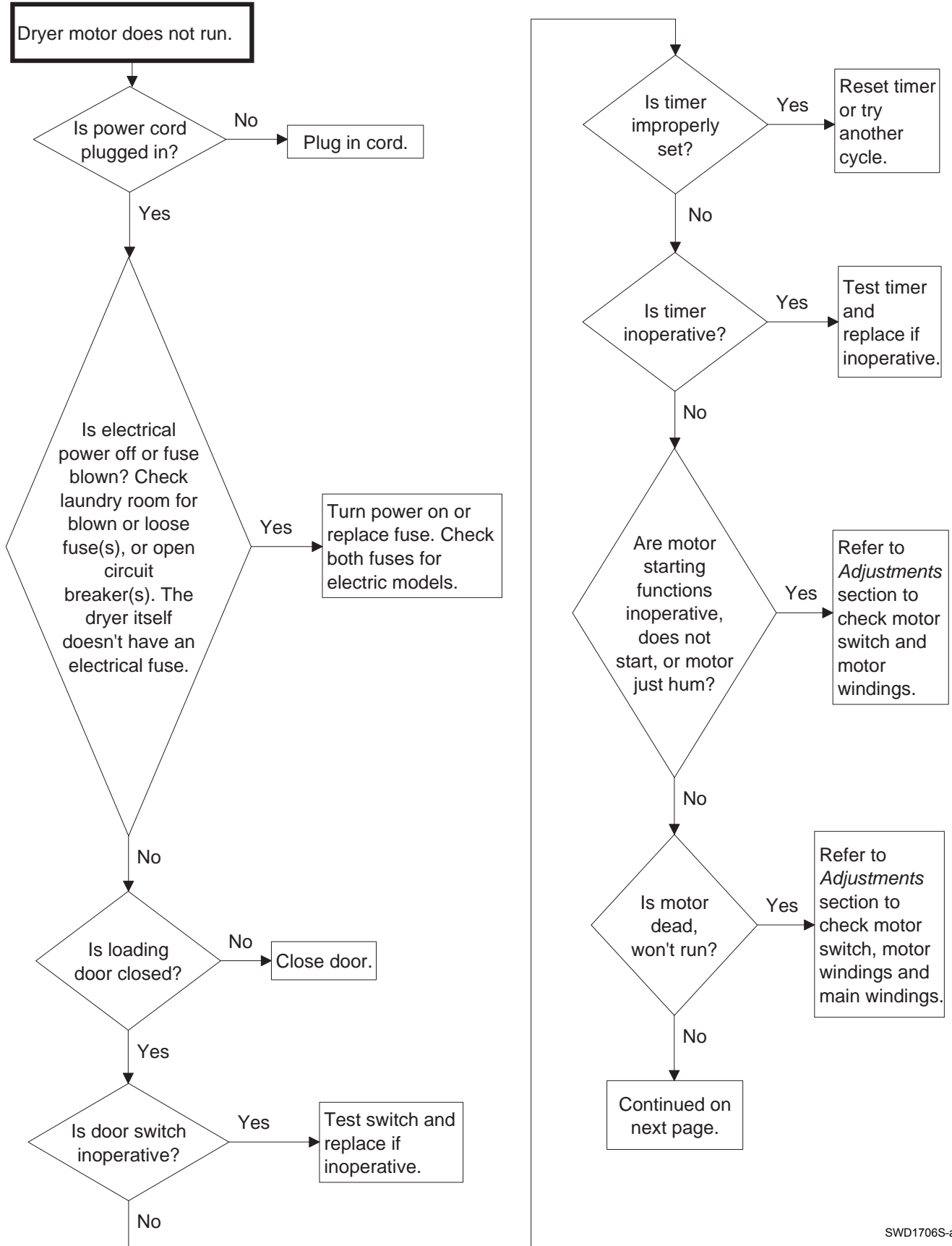
To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1

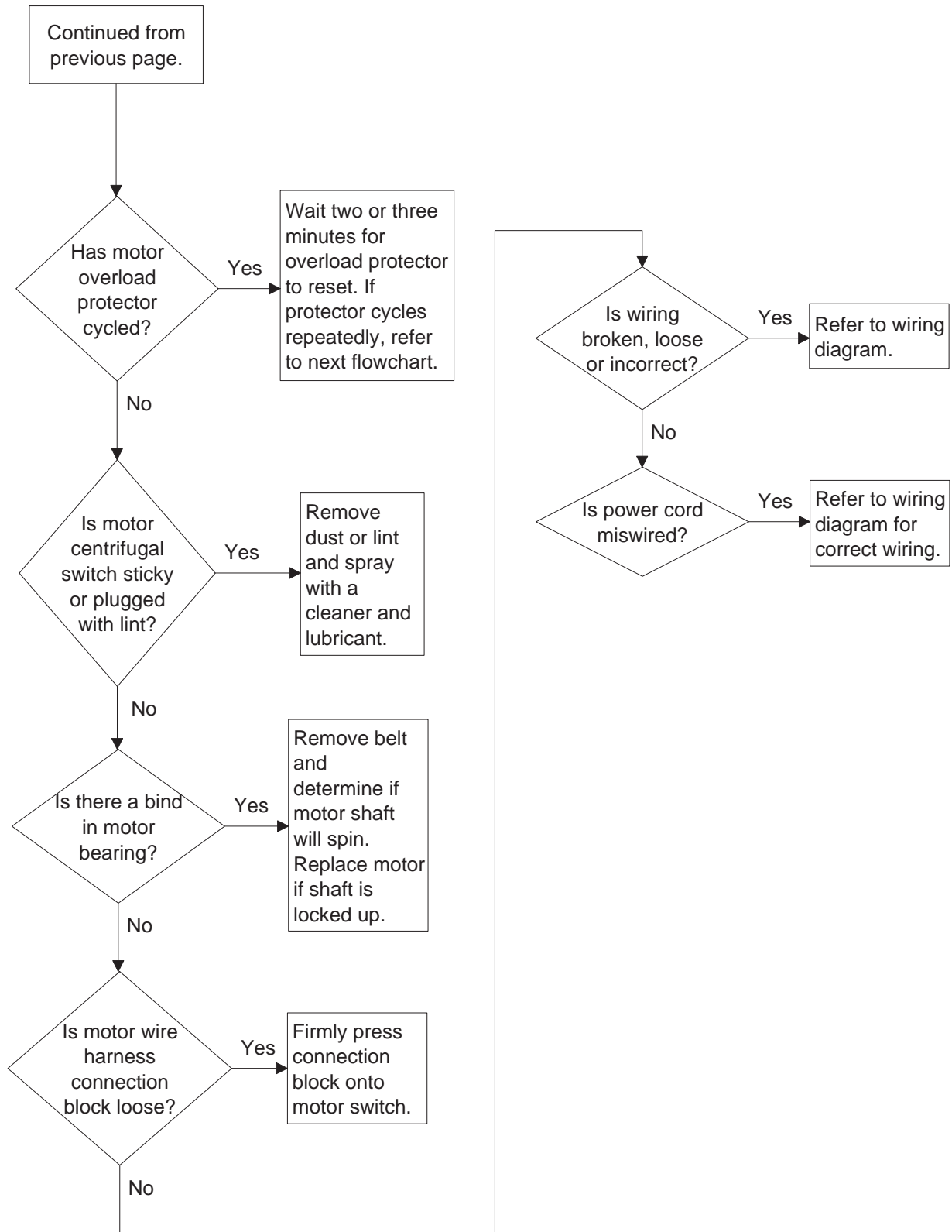
IMPORTANT: Refer to wiring diagram for aid in testing dryer components.

1. DRYER MOTOR DOES NOT RUN



SWD1706S-a

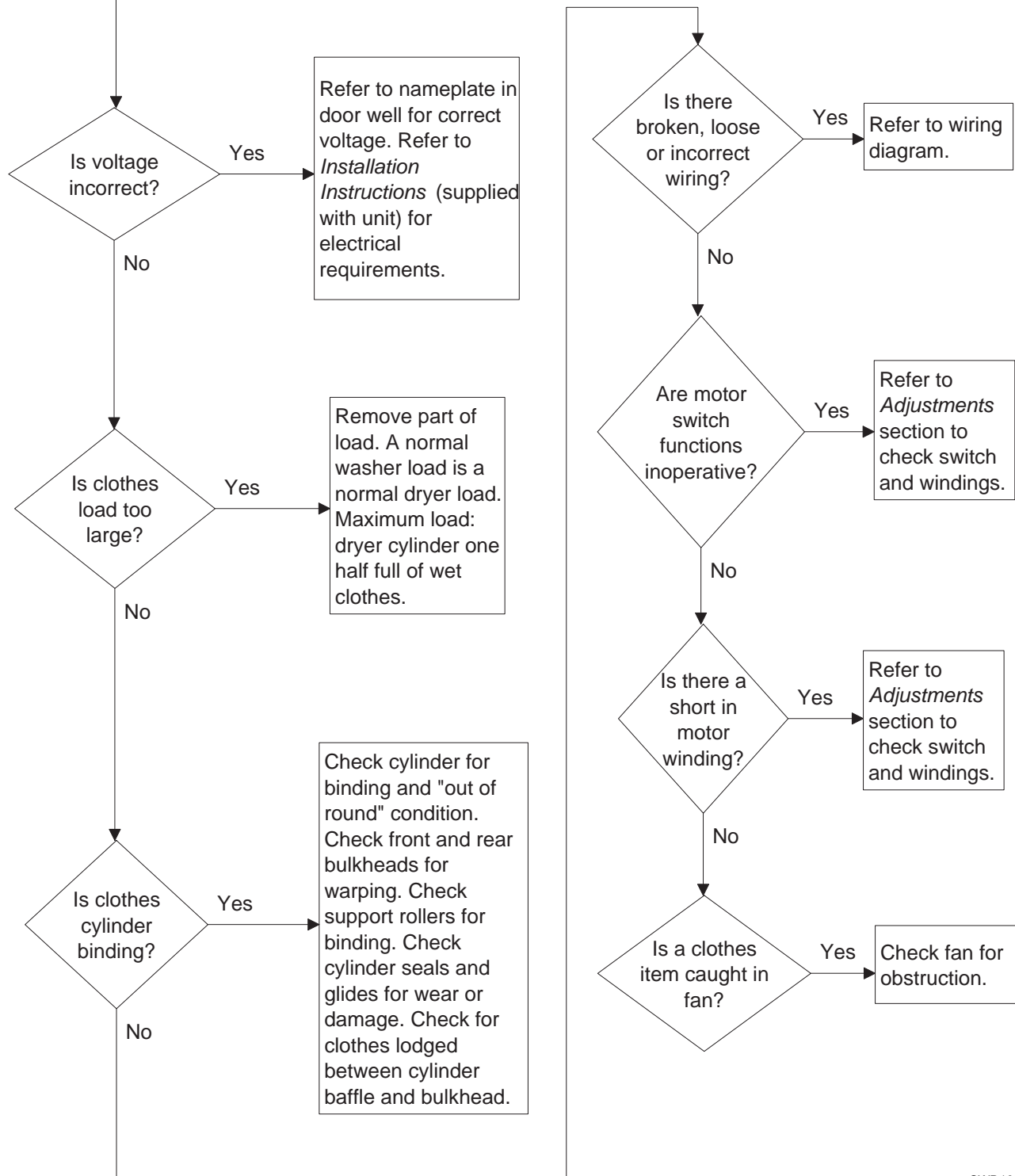
DRYER MOTOR DOES NOT RUN (CONTINUED)



SWD1706S-b

2. DRYER STOPS IN CYCLE; QUILTS AFTER THE FIRST FEW LOADS; HAS A BURNING SMELL; CYCLES ON MOTOR THERMAL PROTECTOR

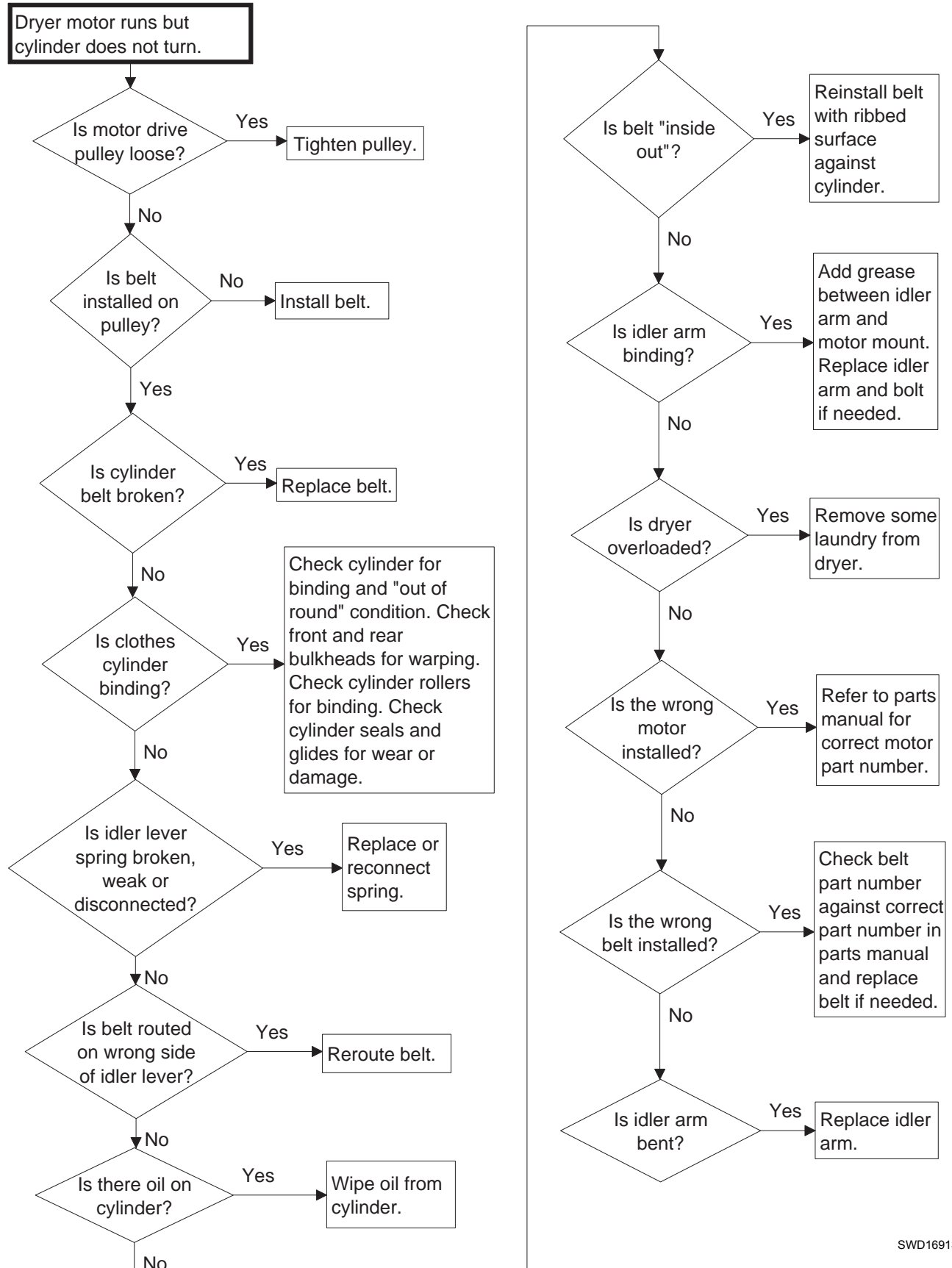
Dryer stops in cycle, quits after first few loads, has burning smell or cycles on motor thermal protector.



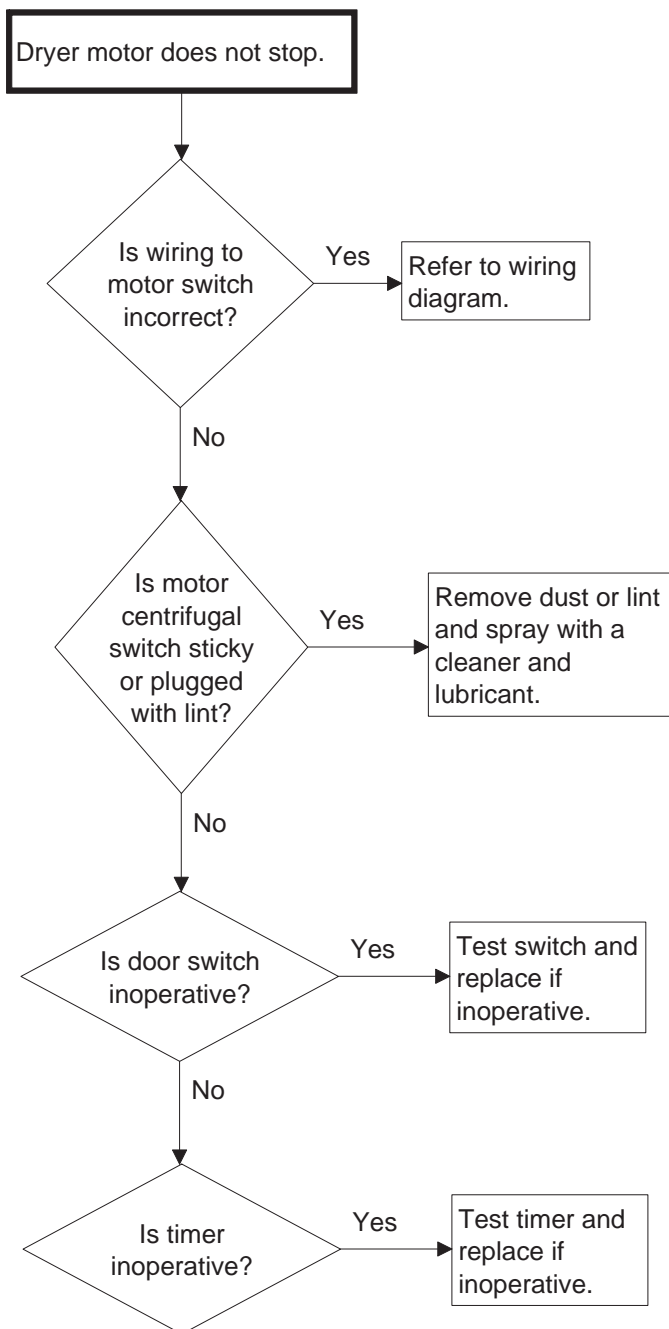
SWD1690S

Section 3 Troubleshooting

3. DRYER MOTOR RUNS BUT CYLINDER DOES NOT TURN

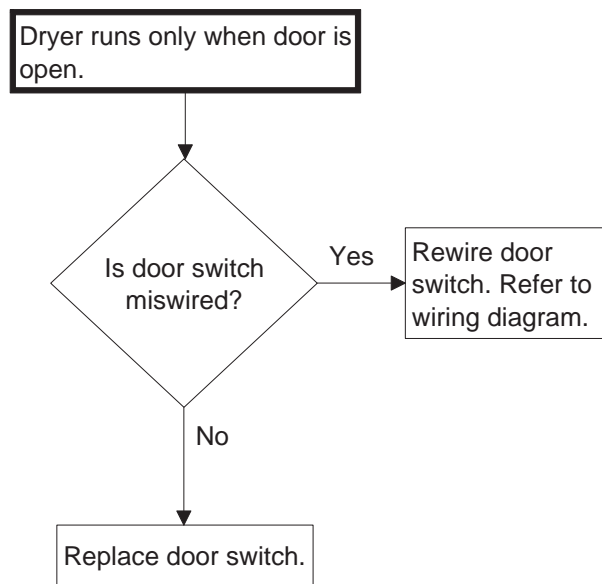


SWD1691S

4. DRYER MOTOR DOES NOT STOP

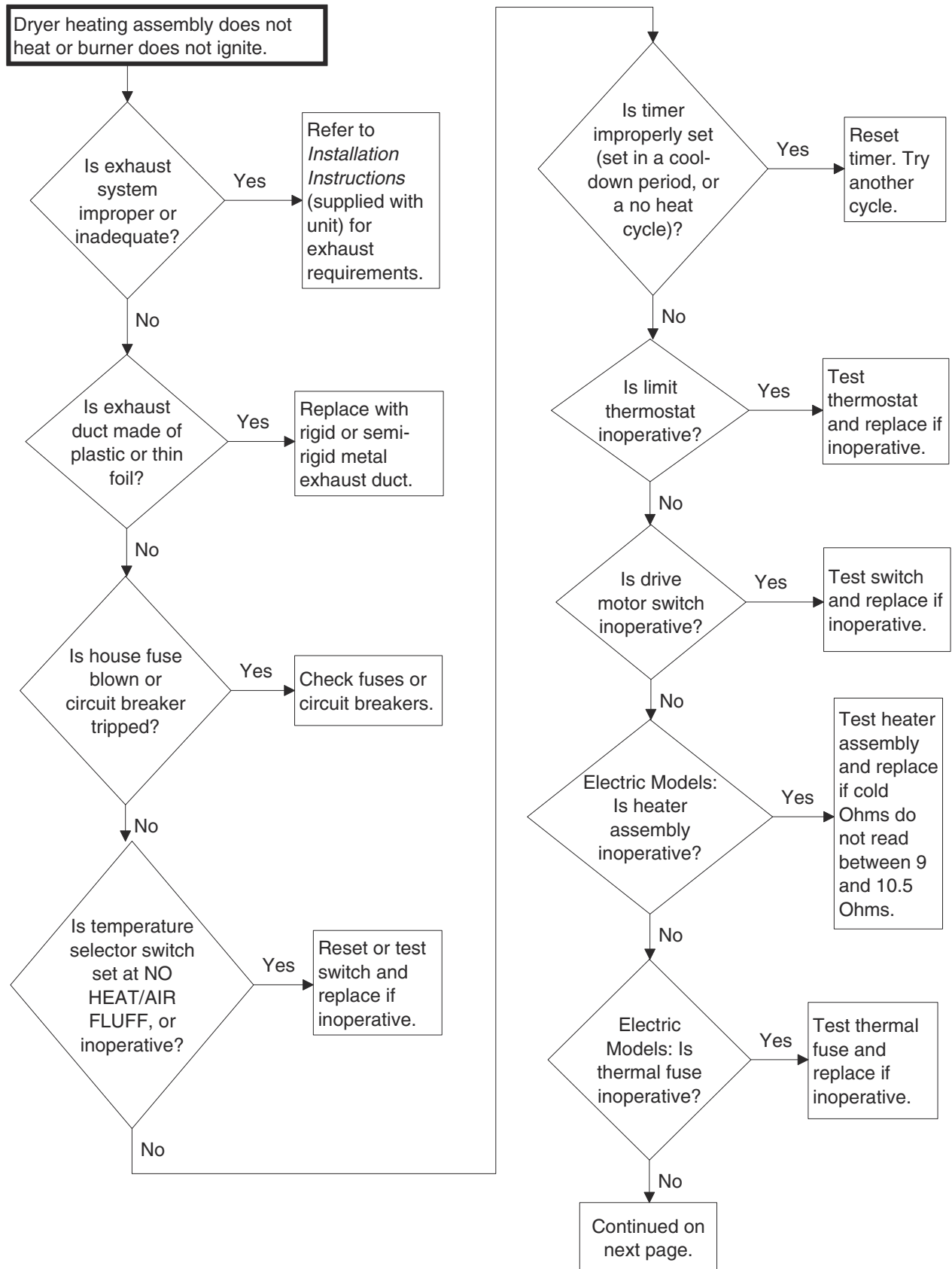
Section 3 Troubleshooting

5. DRYER RUNS ONLY WHEN DOOR IS OPEN



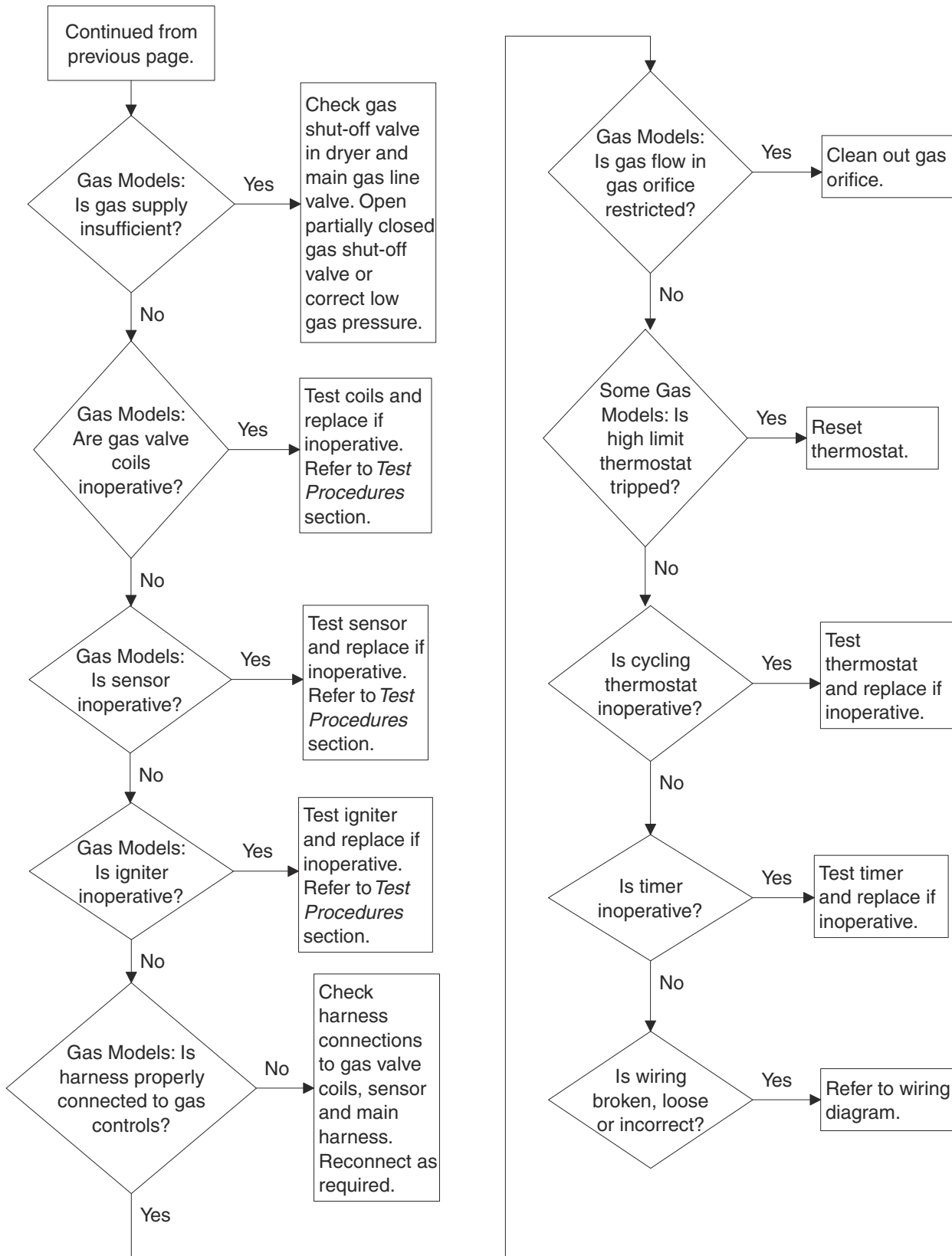
SWD1693S

6. DRYER HEATING ASSEMBLY DOES NOT HEAT OR BURNER DOES NOT IGNITE

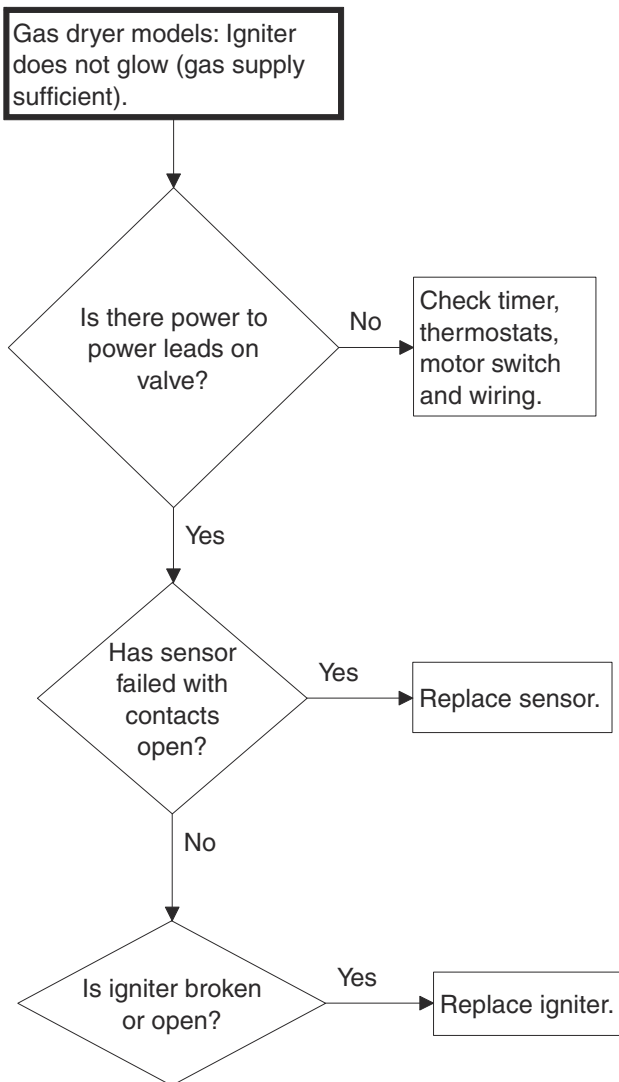


DRY1866S-a

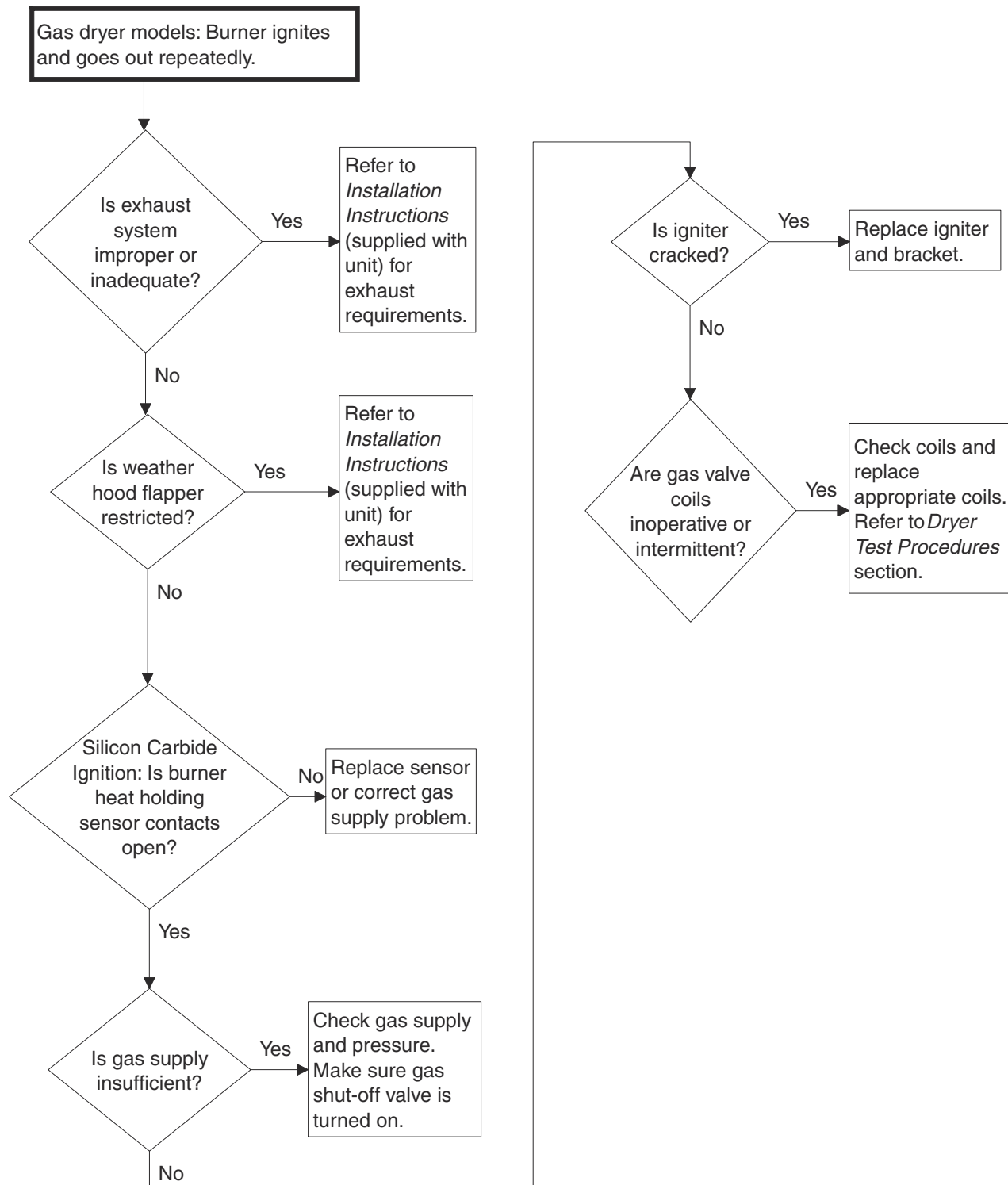
**DRYER HEATING ASSEMBLY DOES NOT HEAT OR BURNER DOES NOT IGNITE
(CONTINUED)**



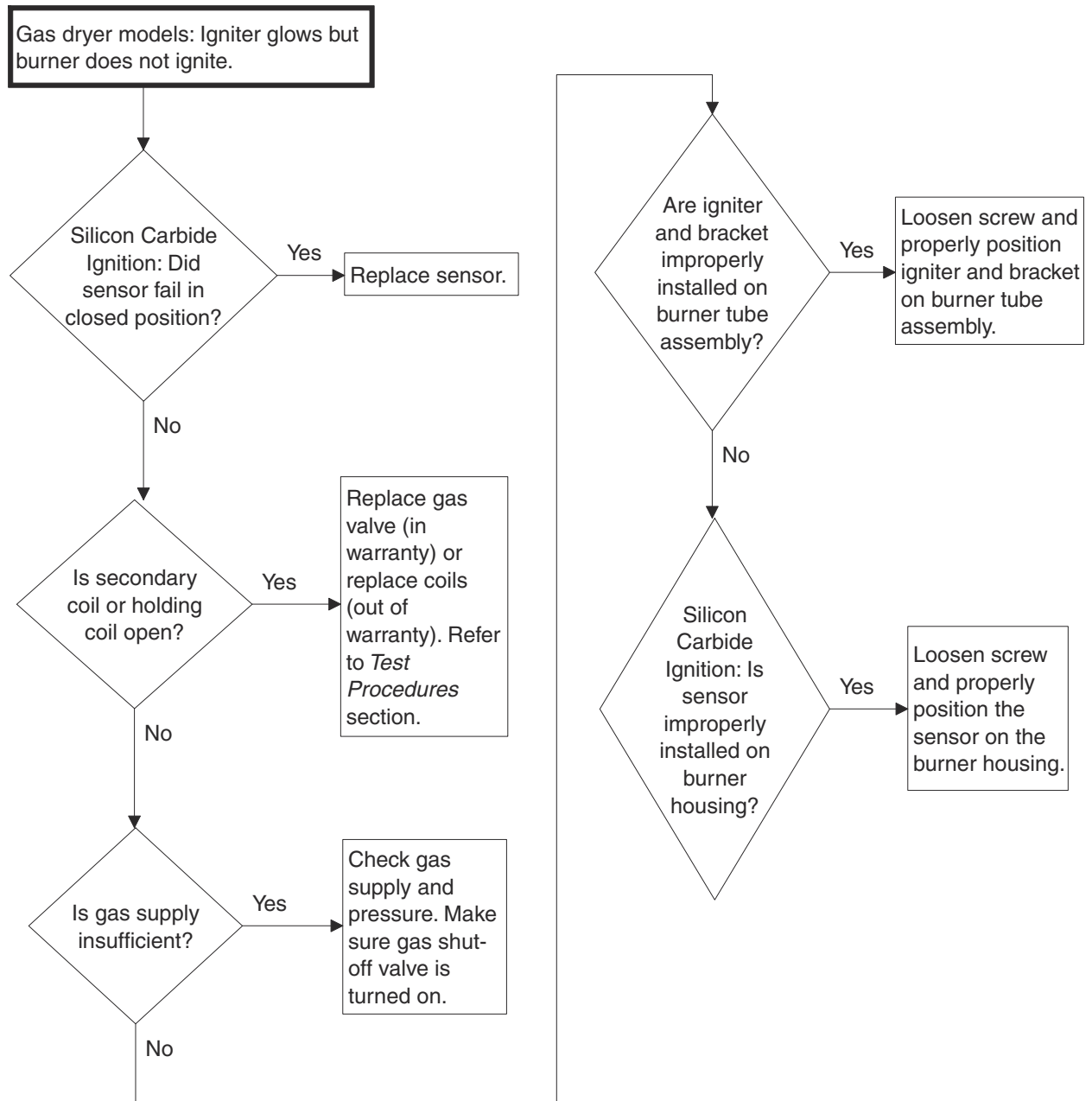
DRY1866S-b

7. IGNITER DOES NOT GLOW (GAS SUPPLY SUFFICIENT) – GAS DRYER MODELS

8. BURNER IGNITES AND GOES OUT REPEATEDLY – GAS DRYER MODELS

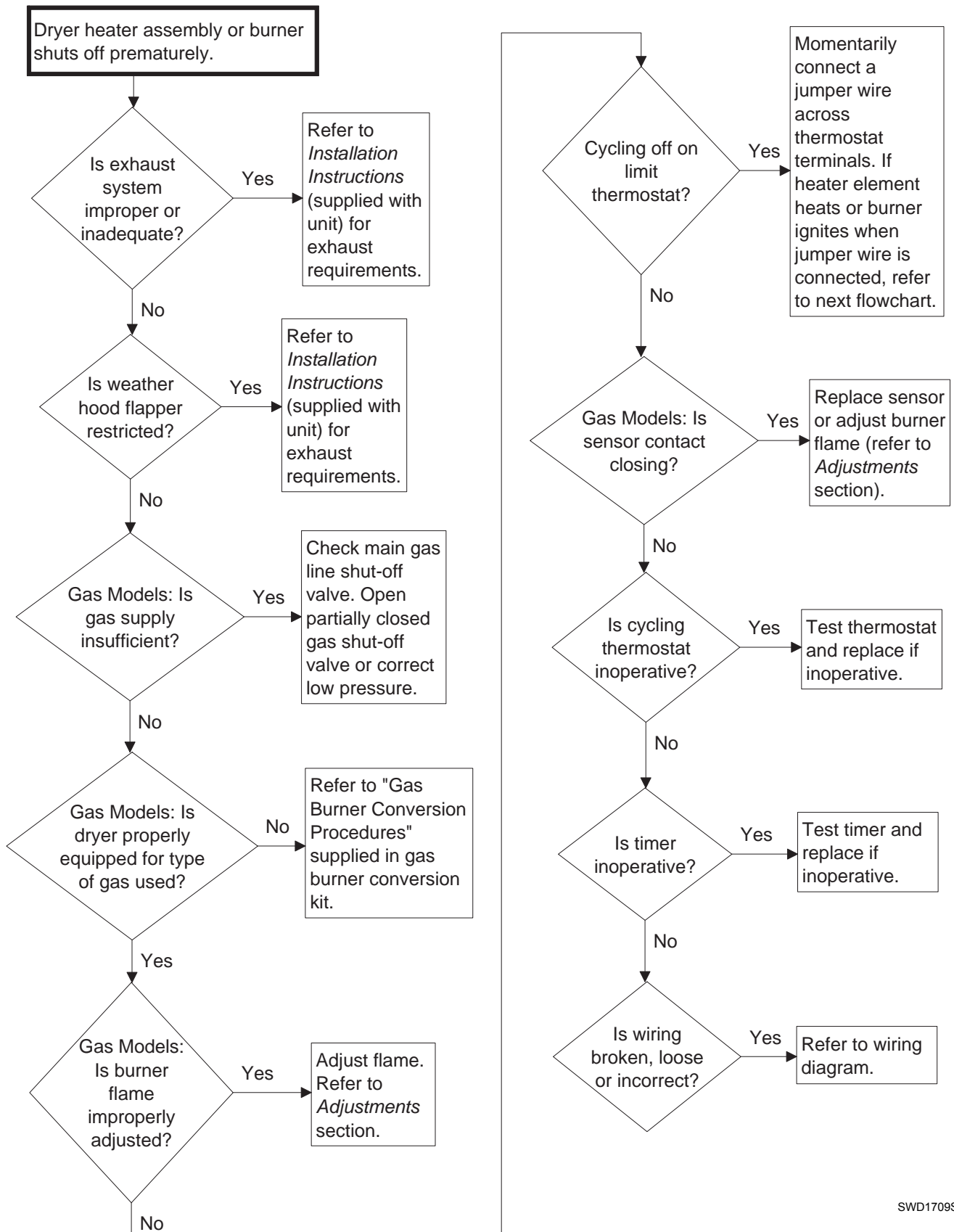


9. IGNITER GLOWS BUT BURNER DOES NOT IGNITE – GAS DRYER MODELS



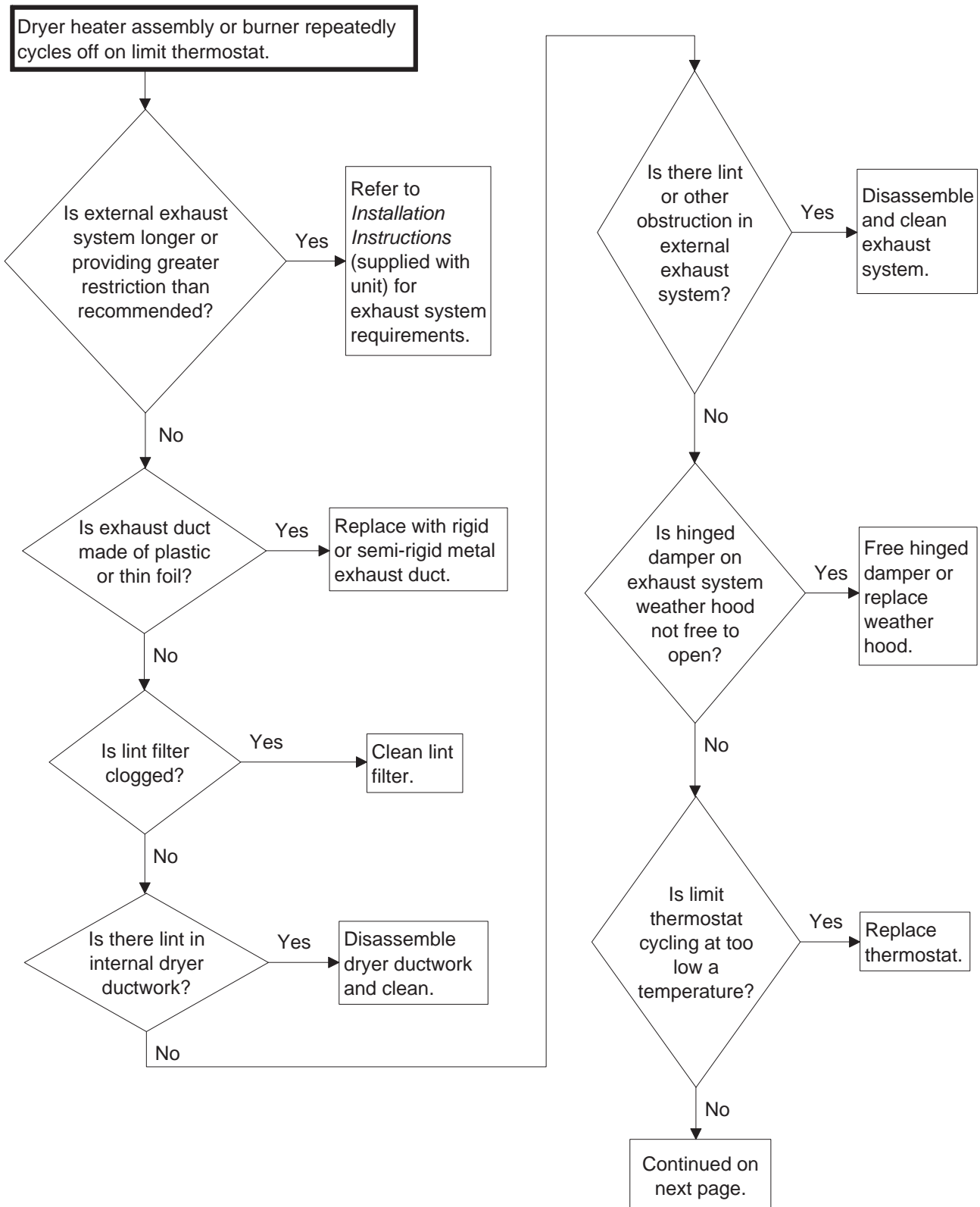
DRY1869S

10. DRYER HEATER ASSEMBLY OR BURNER SHUTS OFF PREMATURELY



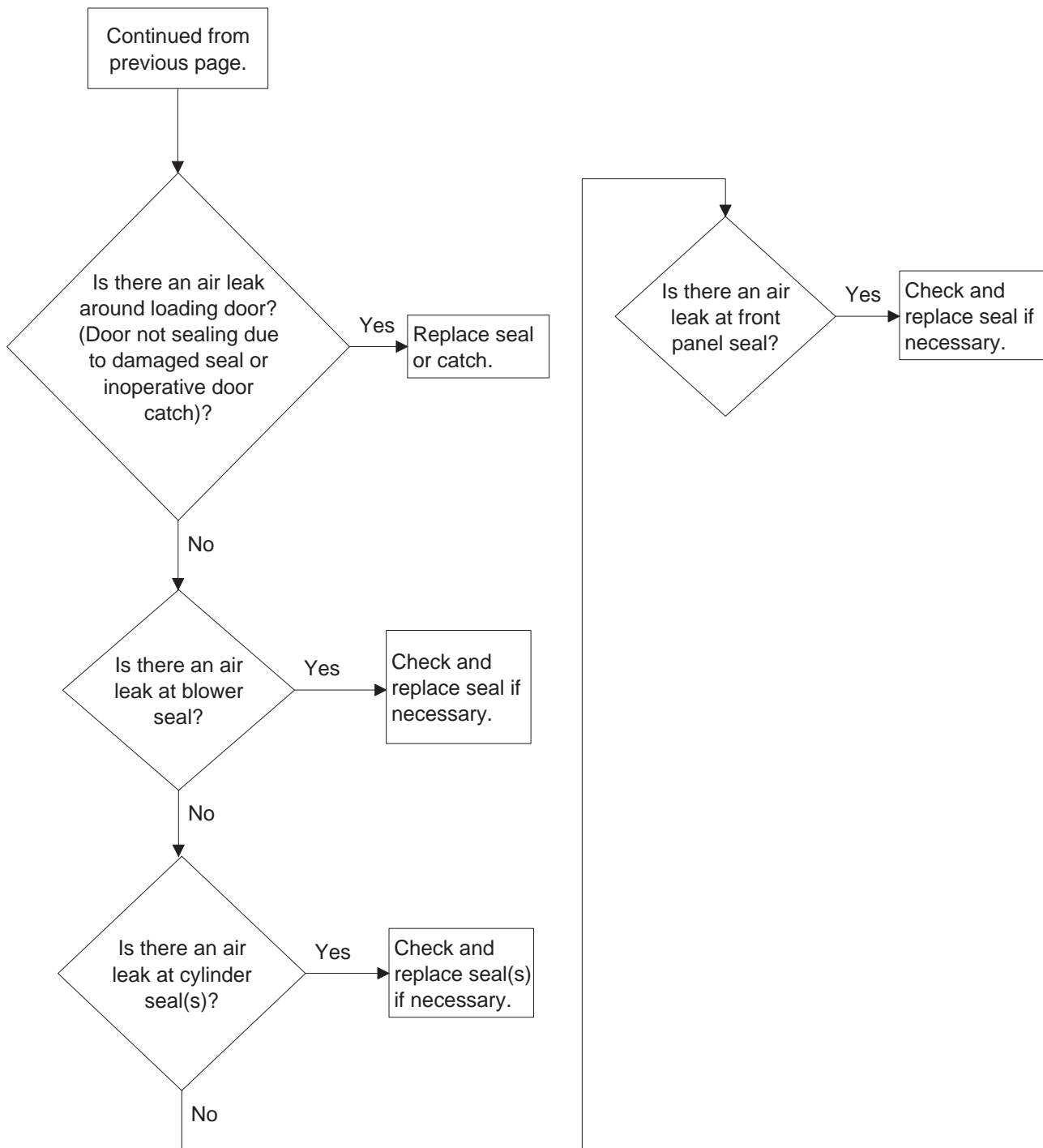
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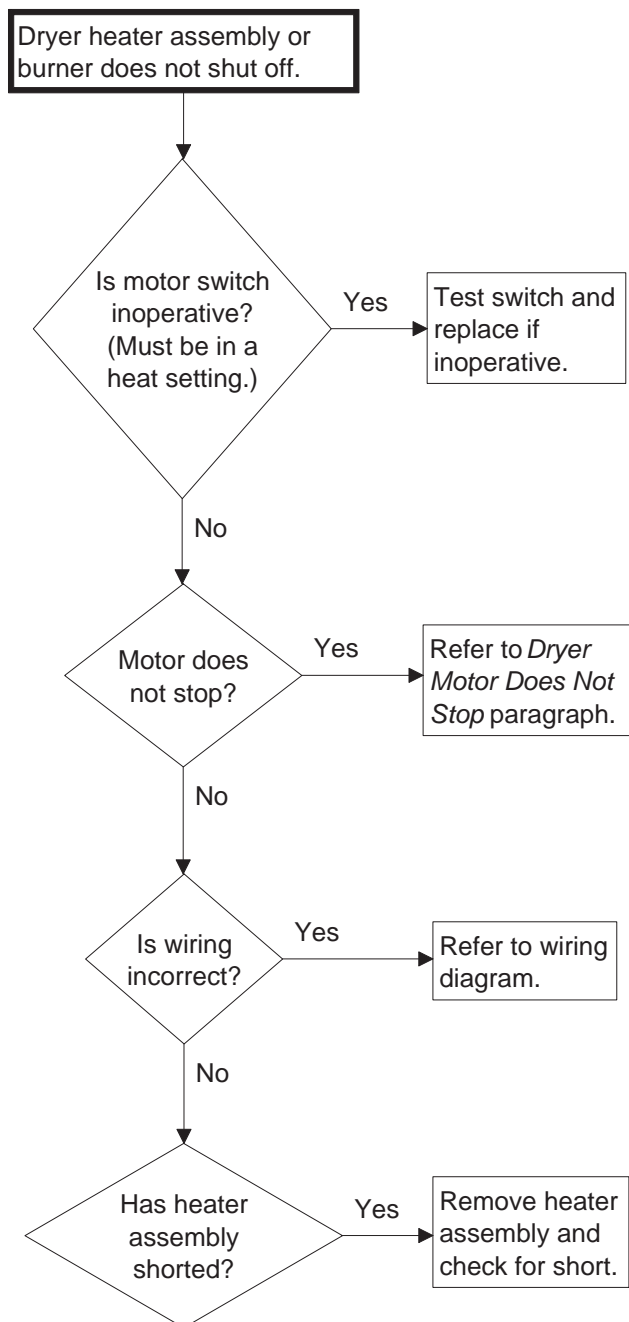
11. DRYER HEATER ASSEMBLY OR BURNER REPEATEDLY CYCLES OFF ON LIMIT THERMOSTAT



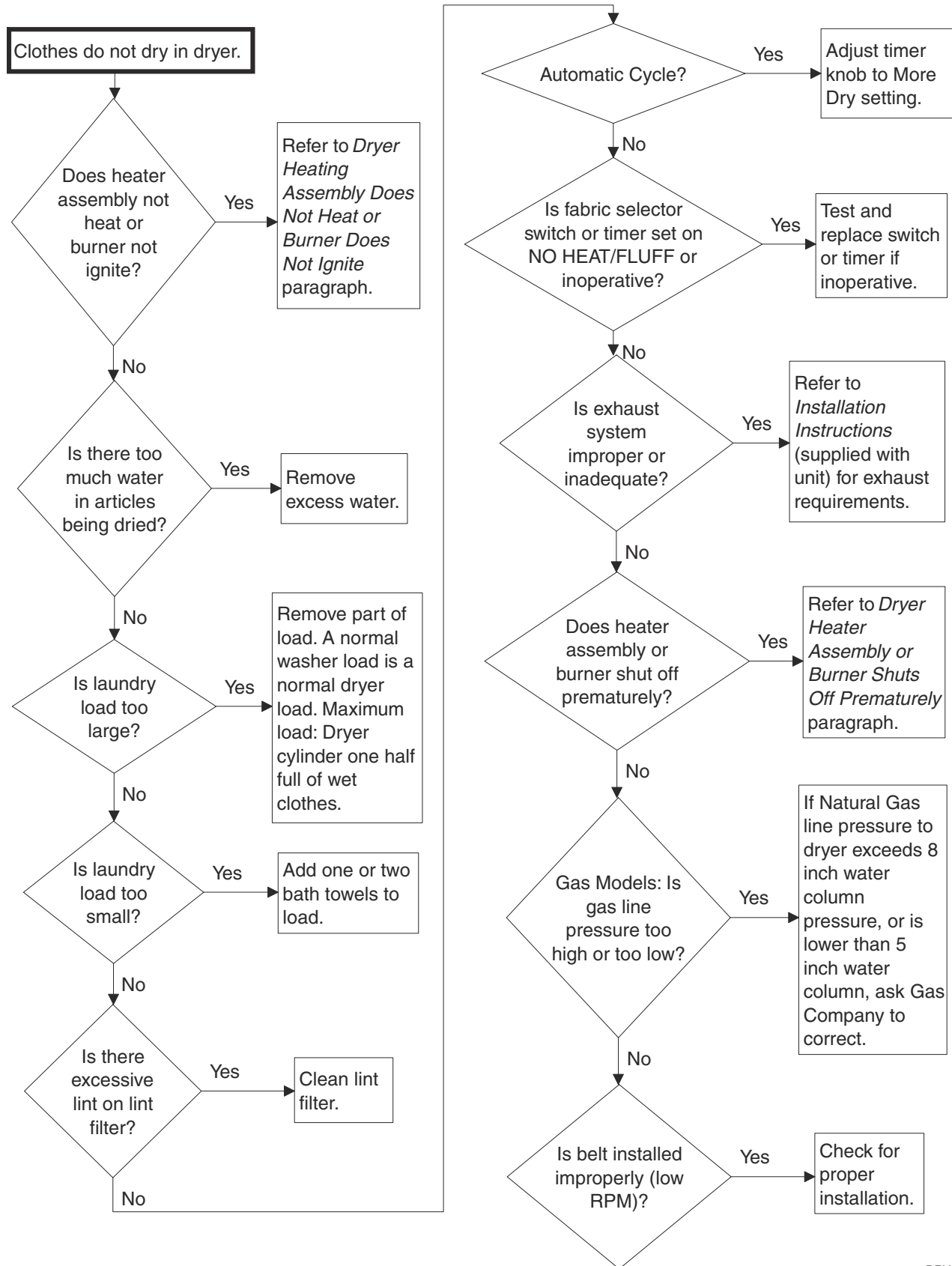
SWD1710S-a

DRYER HEATER ASSEMBLY OR BURNER REPEATEDLY CYCLES OFF ON LIMIT THERMOSTAT (CONTINUED)



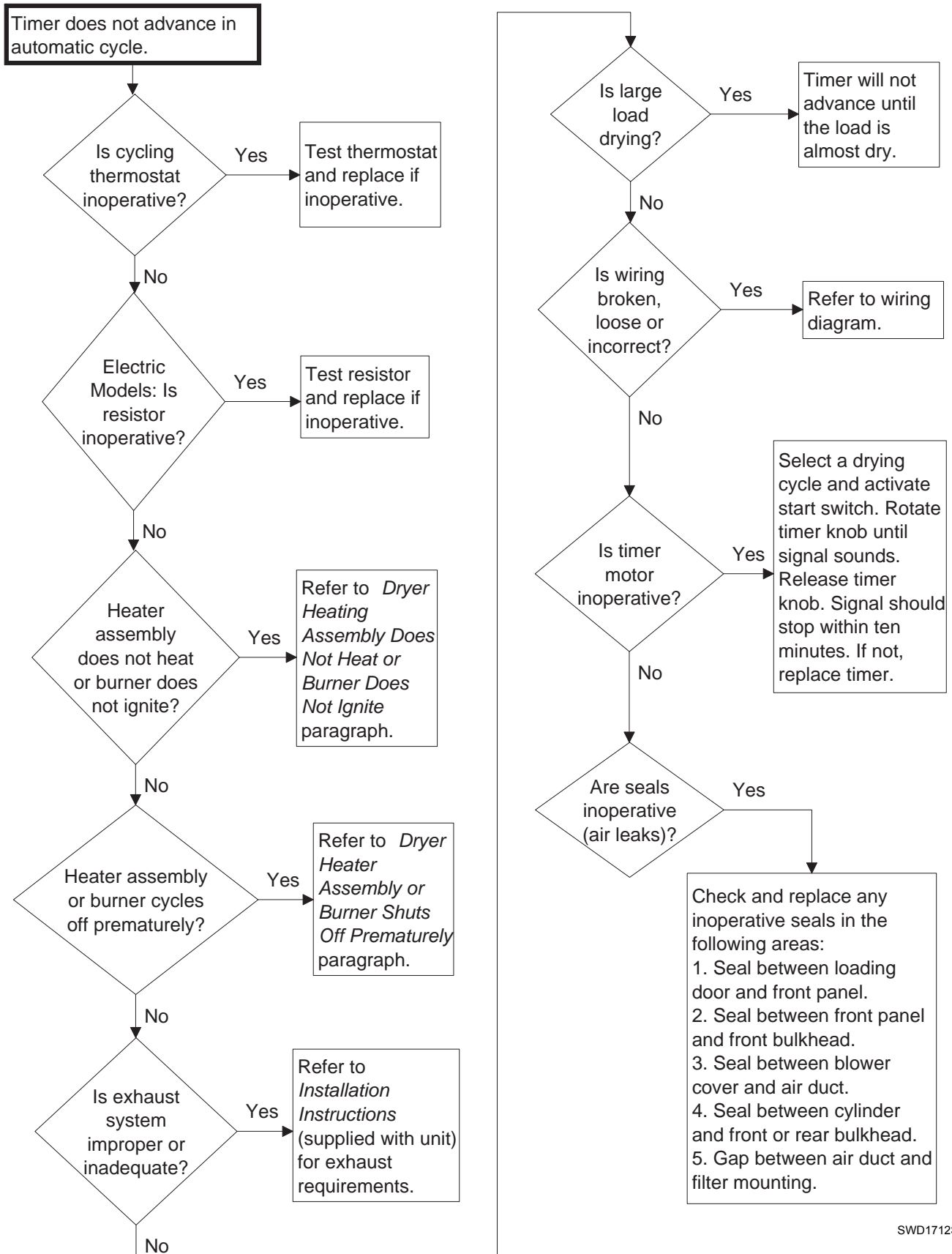
12. DRYER HEATER ASSEMBLY OR BURNER DOES NOT SHUT OFF

13. CLOTHES DO NOT DRY IN DRYER



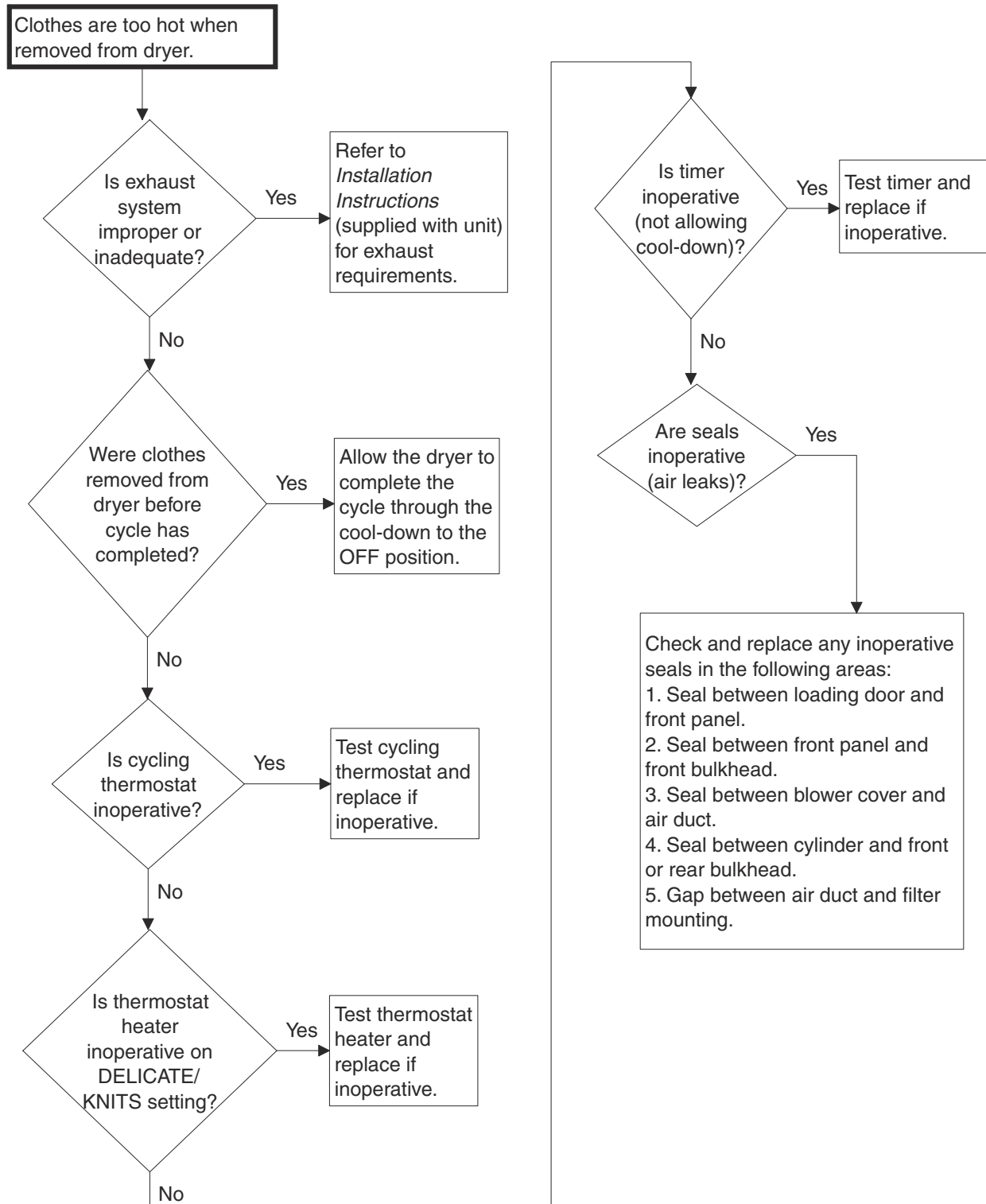
DRY1870S

14. TIMER DOES NOT ADVANCE IN AUTOMATIC CYCLE

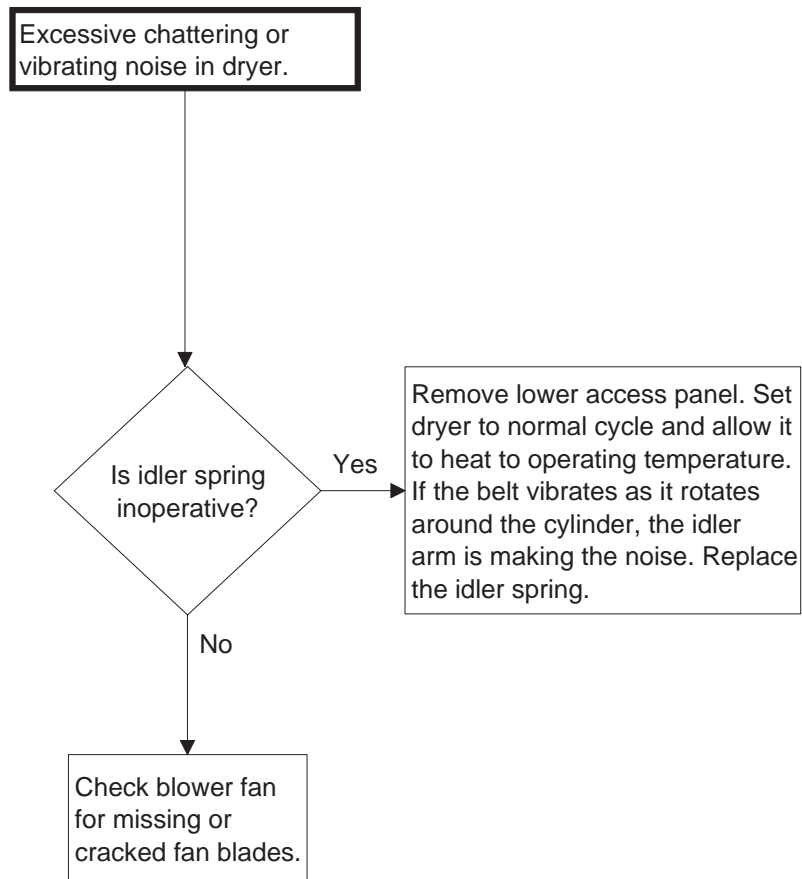


SWD1712S

15. CLOTHES ARE TOO HOT WHEN REMOVED FROM DRYER

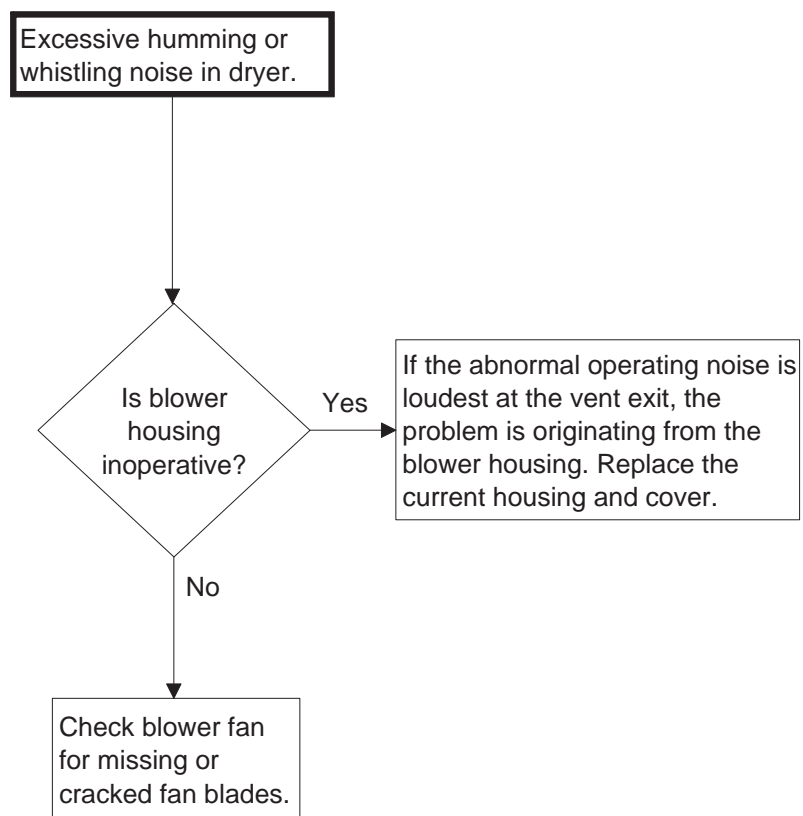


DRY1871S

16. EXCESSIVE CHATTERING OR VIBRATING NOISE IN DRYER

Section 3 Troubleshooting

17. EXCESSIVE HUMMING OR WHISTLING NOISE IN DRYER





WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1


18. IGNITION CONTROL FLASHES

Refer to *Figure 1*.

NOTE: This control will lock-out the igniter after four failed attempts at ignition. **The control can be reset by opening loading door, waiting 1 minute, then closing loading door.** If door is closed before waiting 1 minute, the control will re-enter lockout. The red

light will flash a “Flash Code” when the control is in the lock-out mode. The light will flash on for 1/4 second then off for 1/4 second for each number. The pause between flash codes is 2 seconds. These flashes are caused by the control’s diagnostic test and can be interpreted by reading the following:

FLASH CODE	POSSIBLE CAUSE	TO CORRECT
Constant Light	Internal failure.	• Reset dryer. (Refer to NOTE above.) If condition persists, then replace control.
One Flash	Air in gas line.	• Purge air from gas line.
	Sensor coated with Aluminum Oxide.	• Wipe sensor clean or replace sensor if necessary.
	Incorrect gas pressure.	• Check for correct gas pressure. If gas pressure is incorrect, then contact local gas company.
	Gas shut-off valve closed.	• Open gas shut-off valve.
Four Flashes	Internal failure.	• Reset dryer. If condition persists, then replace control.
	Loose or disconnected wiring.	• Check all wiring leading to, or coming from, the control module for secure connections.
	Open Igniter/igniter sensing circuit/voltage measurement circuit.	• Check igniter and all circuits, replace if necessary.
Five Flashes	Loose or disconnected wiring.	• Check all wiring leading to, or coming from, the control module for secure connections.
	Inoperative gas valve.	• Check gas valve and replace if necessary.
	Inoperative sensor.	• Replace sensor/igniter.
Six Flashes	Loose or disconnected wiring.	• Check all wiring leading to, or coming from, the control module for secure connections.
	Incorrect wiring.	• Check wiring diagram and make sure dryer is wired correctly.
	Incorrect polarity.	• Contact a professional electrician to check the polarity, and correct any problems.



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1

IGNITION CONTROL FLASHES (continued)

FLASH CODE	POSSIBLE CAUSE	TO CORRECT
Seven Flashes	Loose or disconnected wiring.	• Check all wiring leading to, or coming from, the control module for secure connections.
	Sensor and/or appliance not properly grounded.	• Check grounding from control to base, and from lead in cord to dryer.
Rapid Flashing	Incorrect frequency.	• Contact a professional electrician to check the frequency, and correct any problems. Power supply must be 50 – 60 Hz. 2-wire, plus grounding (earth) wire.

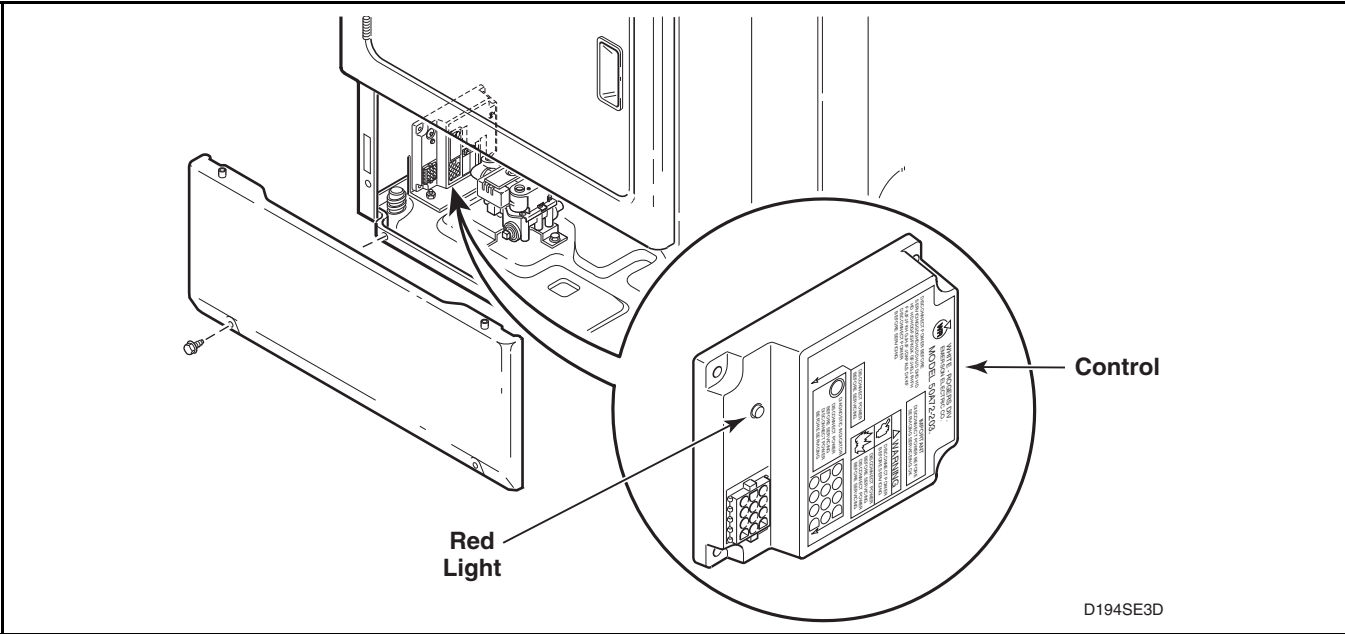


Figure 1

Section 4

Adjustments



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1

IMPORTANT: When reference is made to directions (right or left) in this manual, it is from operator's position facing front of washer.

19. LEVELING LEGS

Refer to *Figure 2*.

NOTE: Dryer should be installed on a solid and level floor.

- a. Place dryer in position, adjusting the legs until dryer is level.

NOTE: Legs can be adjusted outside the dryer by using a 1-1/4 inch size wrench, or from inside the dryer (with lower front access panel removed) by using a 1/4 inch drive ratchet with extension.

- b. Keep dryer as close to the floor as possible. All four legs must rest firmly on the floor so weight of the dryer is evenly distributed. The dryer **MUST NOT** rock.

IMPORTANT: **DO NOT** move the dryer at any time unless the dryer is completely assembled. **DO NOT** slide the dryer across the floor once the leveling legs have been extended as the legs and base could become damaged.



WARNING

To reduce the risk of serious injury or death by carbon monoxide and other gases in gas dryers, carefully read and follow all instructions given in this section.

W005

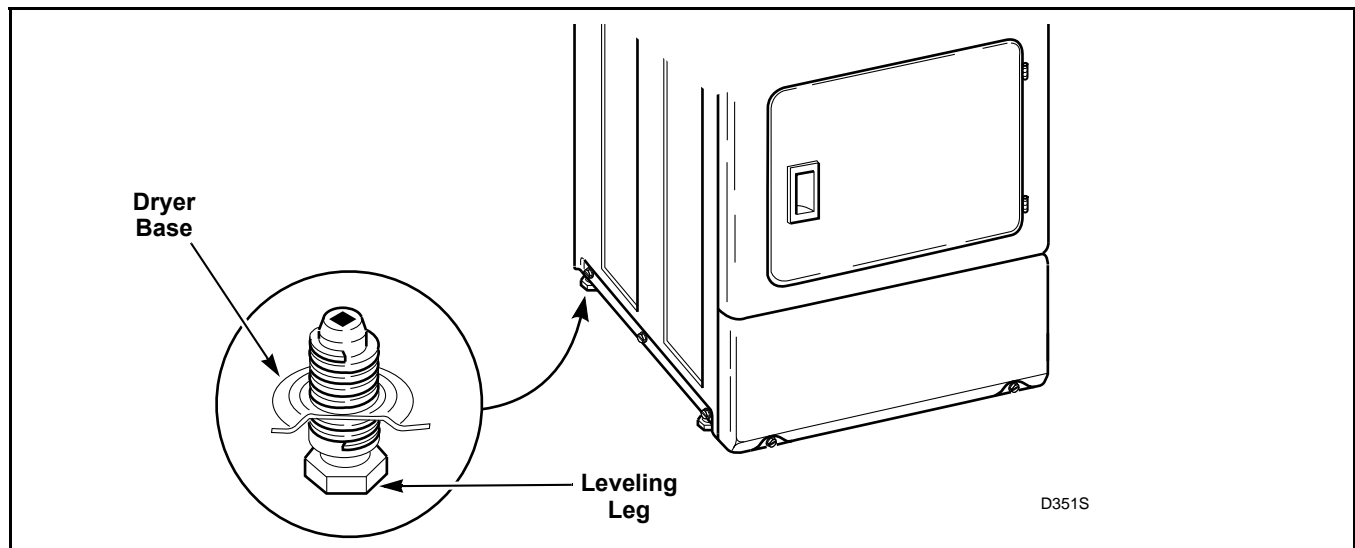


Figure 2



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer(s) before servicing.**
- **Close gas shut-off valve to gas dryer(s) before servicing.**
- **Never start the dryer(s) with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

W001R1

20. BURNER FLAME (Gas Models)

- While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- Set timer to 60 minutes.
- Close the loading door. Start the dryer in a heat setting (refer to Operating Instructions supplied with the dryer). The dryer will start, the igniter will glow red, and the main burner will ignite.
- Allow the dryer to operate for approximately five minutes, then loosen the air shutter lock screw. Refer to *Figure 3*.
- Turn the air shutter to the left to get a luminous yellow tipped flame, then turn it back slowly to the right to obtain a steady blue flame.
- After proper flame is obtained, tighten air shutter lock screw firmly. Refer to *Figure 3*.
- Reinstall access panel and screws.

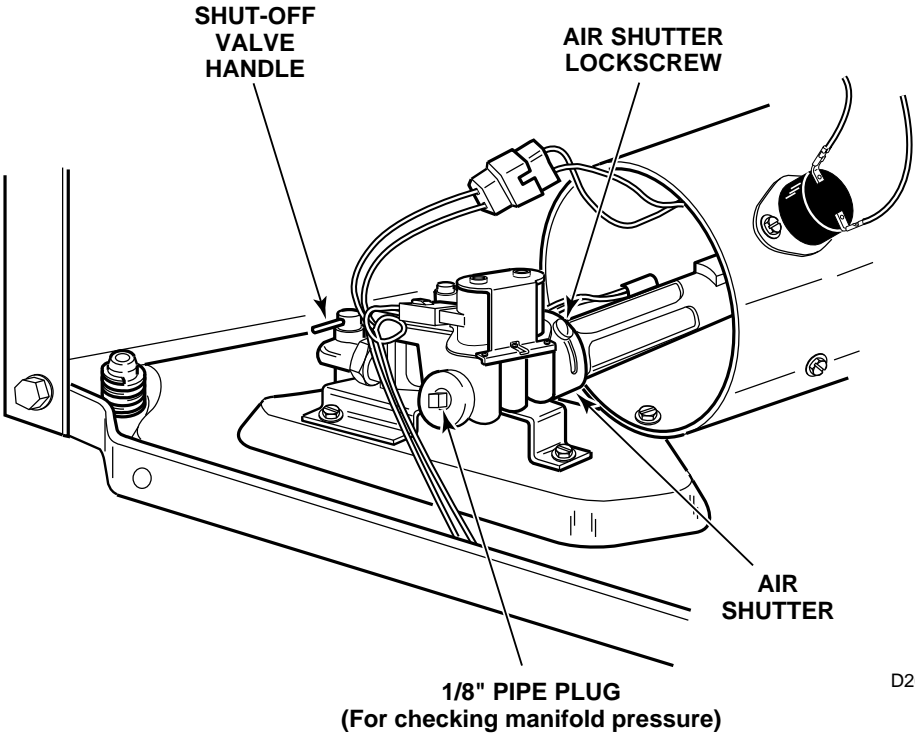


WARNING

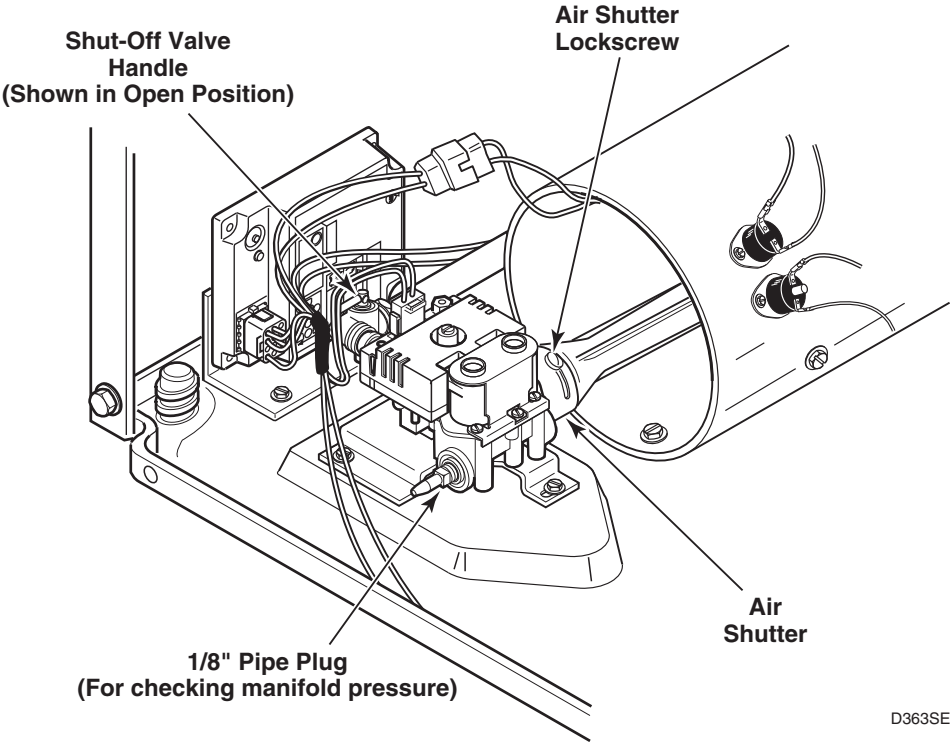
To reduce the risk of fire or serious injury, the access panel must be in place during normal operation.

W262

NOTE: After the dryer has operated for approximately three minutes, exhaust air or exhaust pipe should be warm.



SILICON CARBIDE IGNITION SYSTEM



SILICON NITRIDE IGNITION SYSTEM

Figure 3

Section 5

Test Procedures



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1

IMPORTANT: Electrical test procedures in this service manual are performed by using a Volt-Ohm meter. Tests can also be performed using a multi-meter or any other electrical testing equipment with which the service person is familiar.

21. TIMER CONTACTS

Refer to *Figure 4*.

- Disconnect wires from timer, except timer motor wires.

NOTE: Refer to appropriate wiring diagram when rewiring timer.

- Manually rotate timer out of "OFF" position and into cycle.
- Set test meter to read Ohms. The following readings should be found:
 - (1) Motor circuit test – L1 and M = "zero" Ohms (closed)
 - (2) Heat circuit test – L2 and H = "zero" Ohms (closed)
 - (3) Timer motor test – T and M (1702 and 1709 suffix models) or T and N (all other models) = approximately 2462-2714 Ohms or apply live power to timer motor terminals and motor should run.

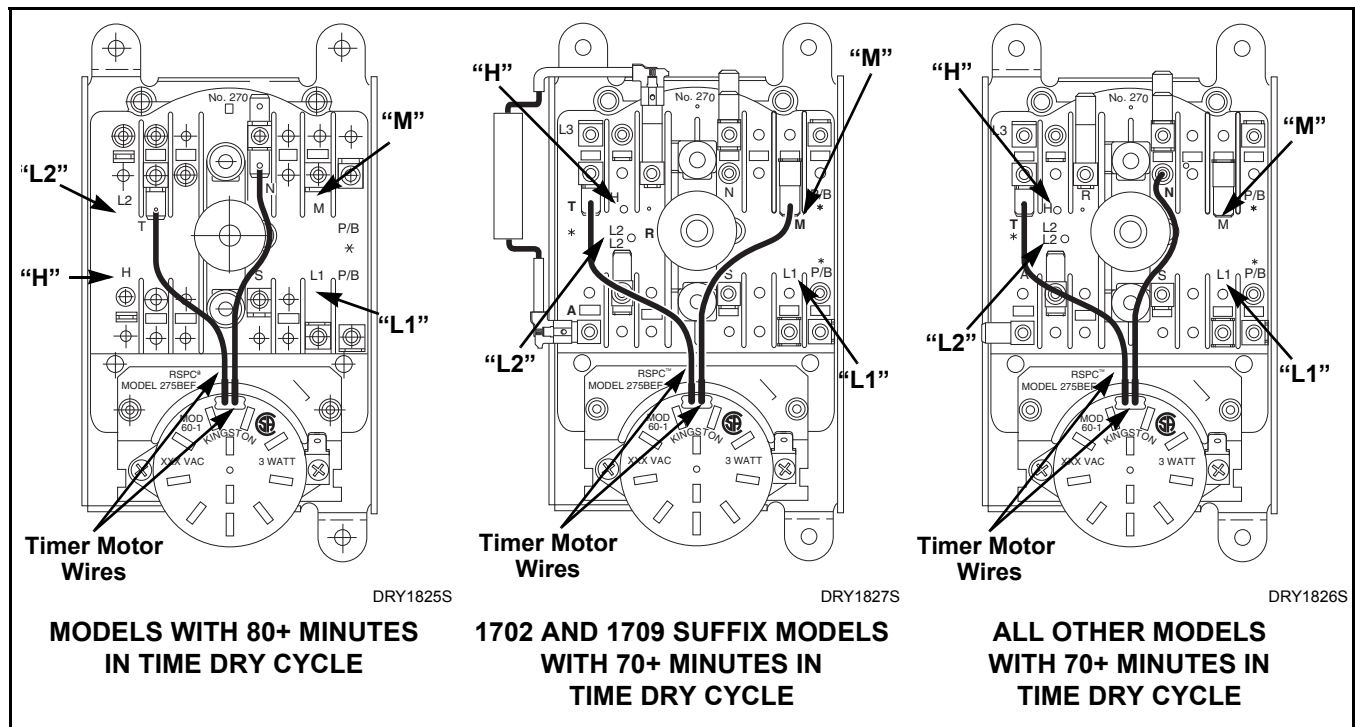


Figure 4



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

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NOTE: Timer Motor Resistance:

120 Volt, 60 Hz	2,462 – 2,714 Ohms
240 Volt	10,900 – 13,300 Ohms
24 Volt	108 – 132 Ohms

- (4) Rotate timer to “cooldown” (5 minutes before “OFF”). “Infinite” (open) reading should be found between L2 and H.
- (5) Rotate timer to “OFF” position. “Infinite” (open) reading should be found between L1 and M and between L2 and H.

NOTE: Timer motor power is supplied through M (1702 and 1709 models) or N (all other models) terminal.

22. FABRIC SELECTOR SWITCH

NOTE: Refer to proper model wiring diagram when rewiring switch.

- a. Set test meter to read Ohms and apply meter probes to switch terminals.

NOTE: Refer to proper model wiring diagram when reconnecting wires.

FABRIC SELECTOR SWITCH – 4 Position		
	L1-1	L1-2
No Heat/Air Fluff	–	–
Delicate	X	X
Perm. Press	–	X
Regular	–	X
X indicates closed		

FABRIC SELECTOR SWITCH – 3 Position			
	L1-2	L1-3	L1-1
No Heat/Air Fluff	–	X	–
Delicate/Knits	X	–	X
Regular/Perm. Press	X	–	–
X indicates closed			



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

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23. DRIVE MOTOR

Refer to *Figure 5*.

- Remove motor and exhaust assembly. Refer to *Paragraph 51*.
- Disconnect motor wire harness at motor disconnect block.

NOTE: Refer to wiring schematic, Section 8, for internal motor switch wires.

NOTE: Drive Motor Resistance

120 Volt	2,460 – 3,100 Ohms
240 Volt	10,000 - 13,000 Ohms

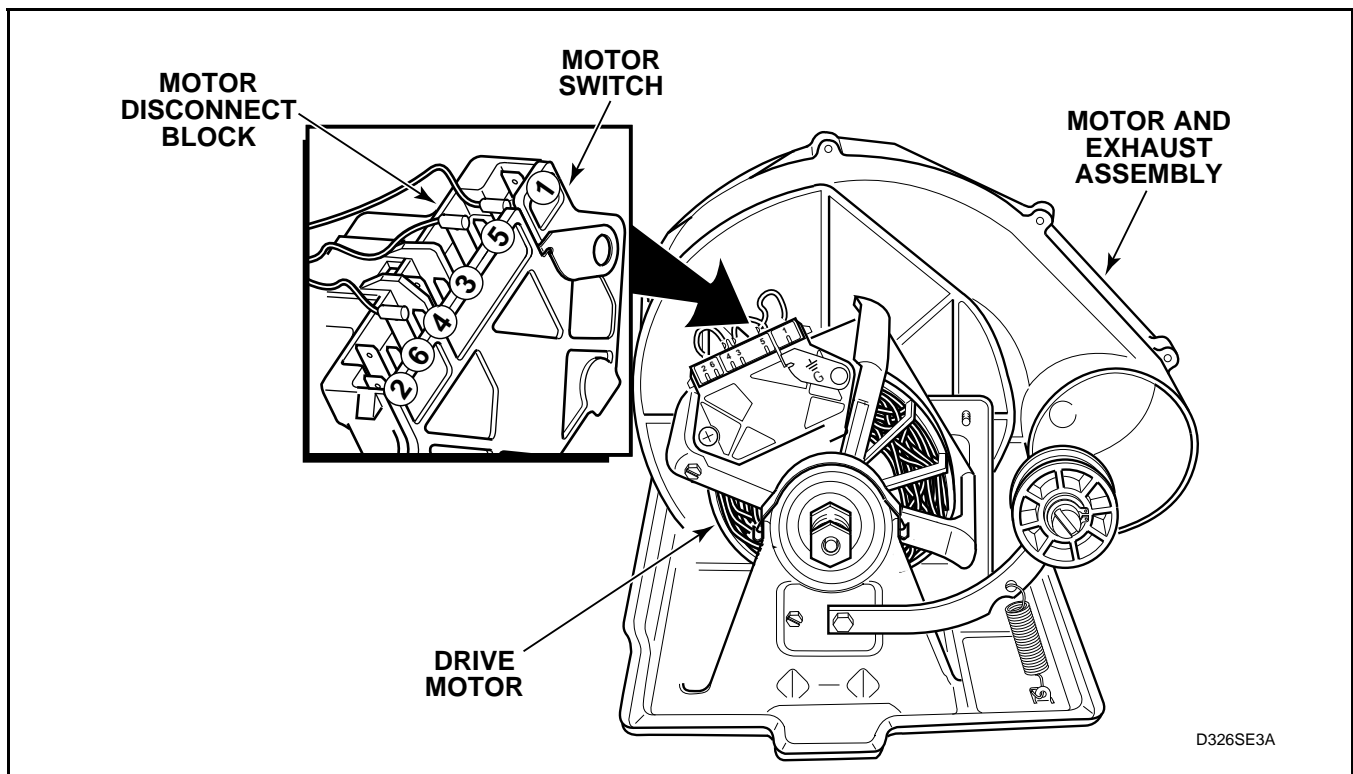


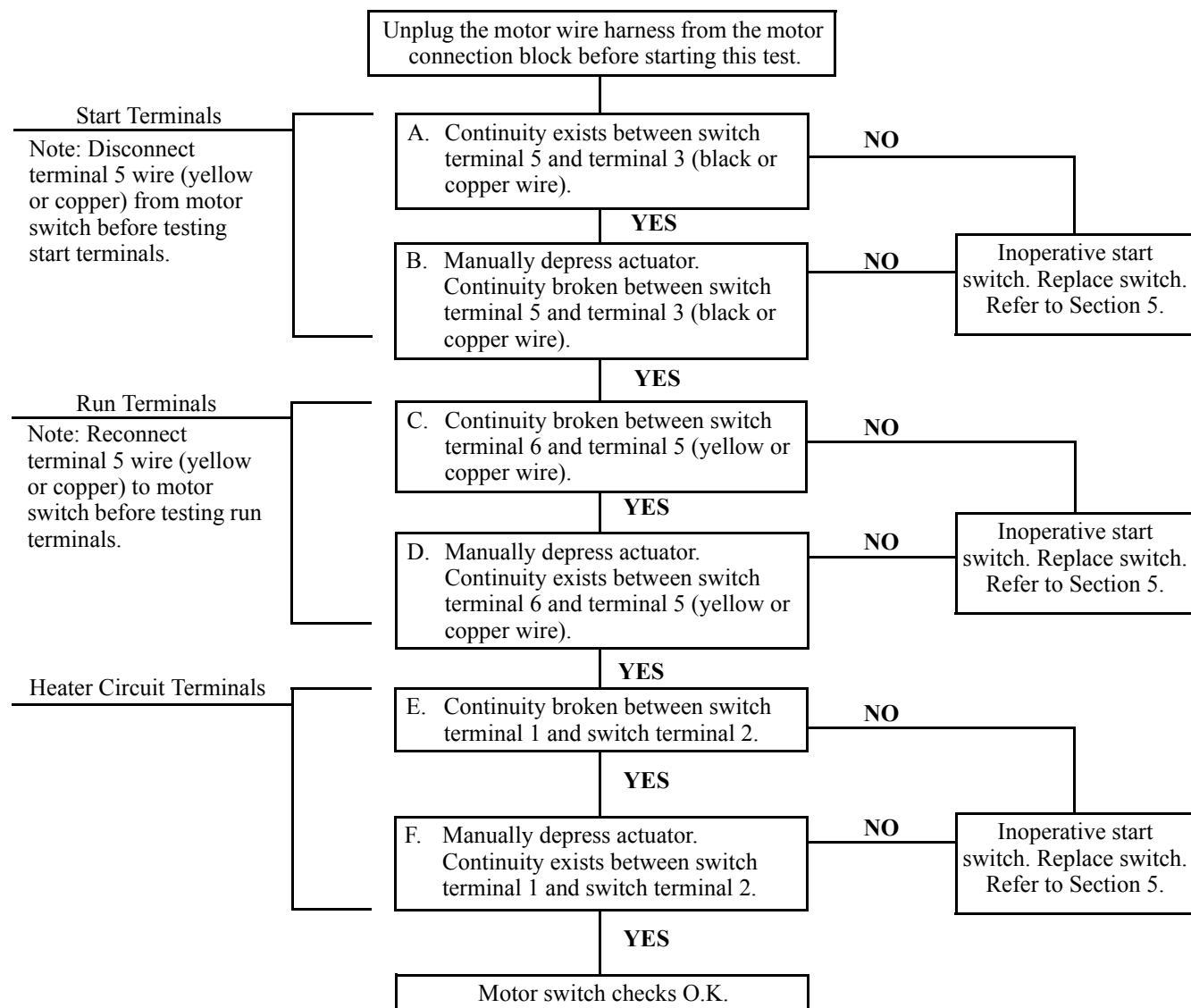



Figure 5

	<h2 style="margin: 0;">WARNING</h2>
<p>To reduce the risk of electric shock, fire, explosion, serious injury or death:</p> <ul style="list-style-type: none"> Disconnect electric power to the dryer(s) before servicing. Close gas shut-off valve to gas dryer(s) before servicing. Never start the dryer(s) with any guards/panels removed. Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded. 	
<small>W001R1</small>	

c. **Motor Switch** (Refer to SECTION 8 for Internal Wiring of the Dryer Motor Switch.)

	<h2 style="margin: 0;">WARNING</h2>
<p>Disconnect electric power to dryer before performing any of the following steps or when replacing inoperative motor switch.</p>	
<small>W290</small>	






WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

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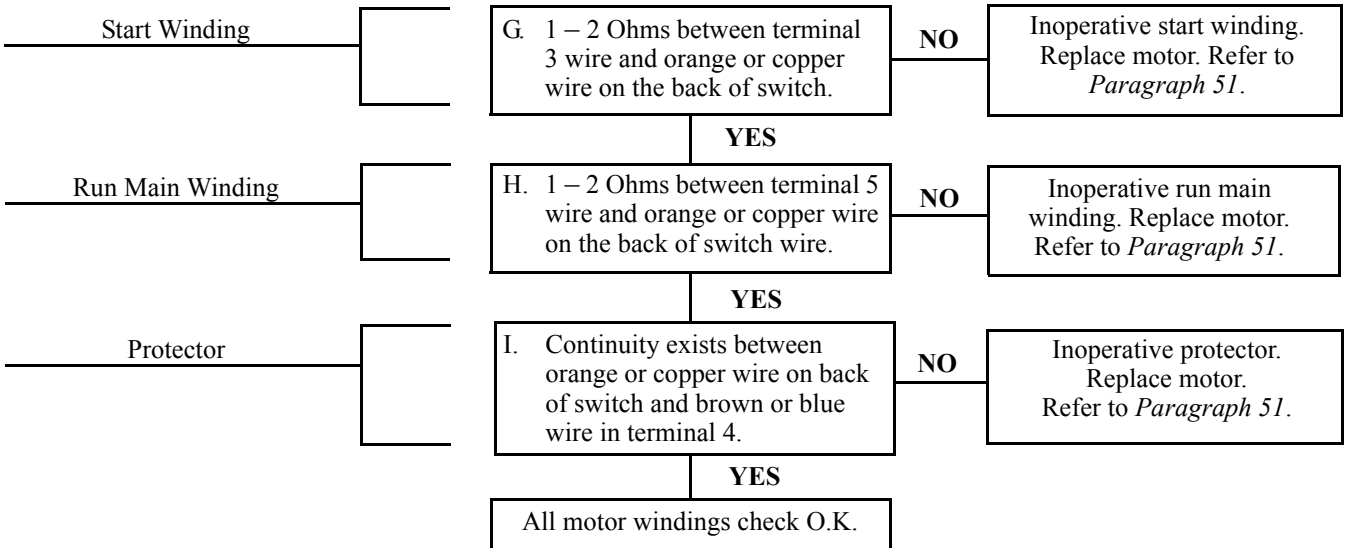
d. **Motor Windings** (Refer to SECTION 8 for Internal Wiring of the Dryer Motor Switch.)



WARNING

Disconnect electric power to dryer before performing any of the following steps or when replacing inoperative motor switch.

W290





WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

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24. MOTOR SWITCH

- Remove motor and exhaust fan assembly. Refer to *Paragraph 51*.
- Remove the two motor switch attaching screws. Refer to *Figure 10*. Disconnect switch leads. Remove motor switch.
- Remove thermal overload protector.

NOTE: The thermal overload protector is unique to the motor from which it was removed and should only be used on that motor. To reduce the risk of overheating the motor, do not use any thermal overload protector other than the one taken from the inoperative motor switch in step 3.

(1) Motor with Switch on Blower End

Using a small bladed screwdriver, press the thermal overload protector mounting tab downward and remove the thermal overload protector from the inoperative motor switch. Refer to *Figure 6*.

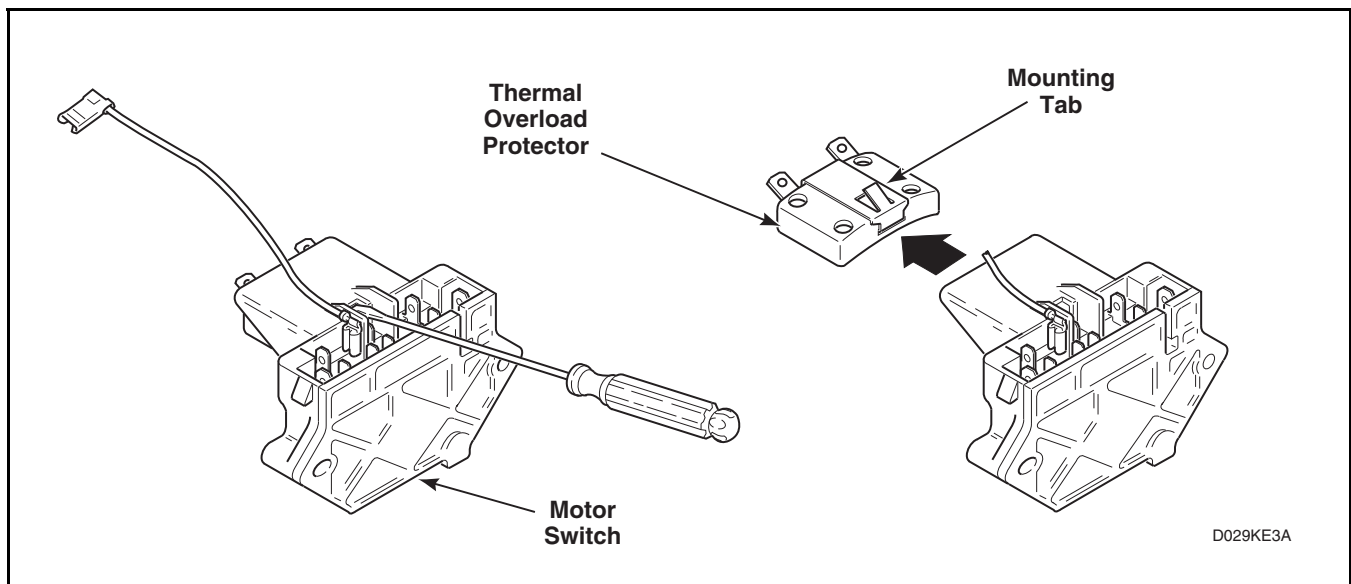


Figure 6



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

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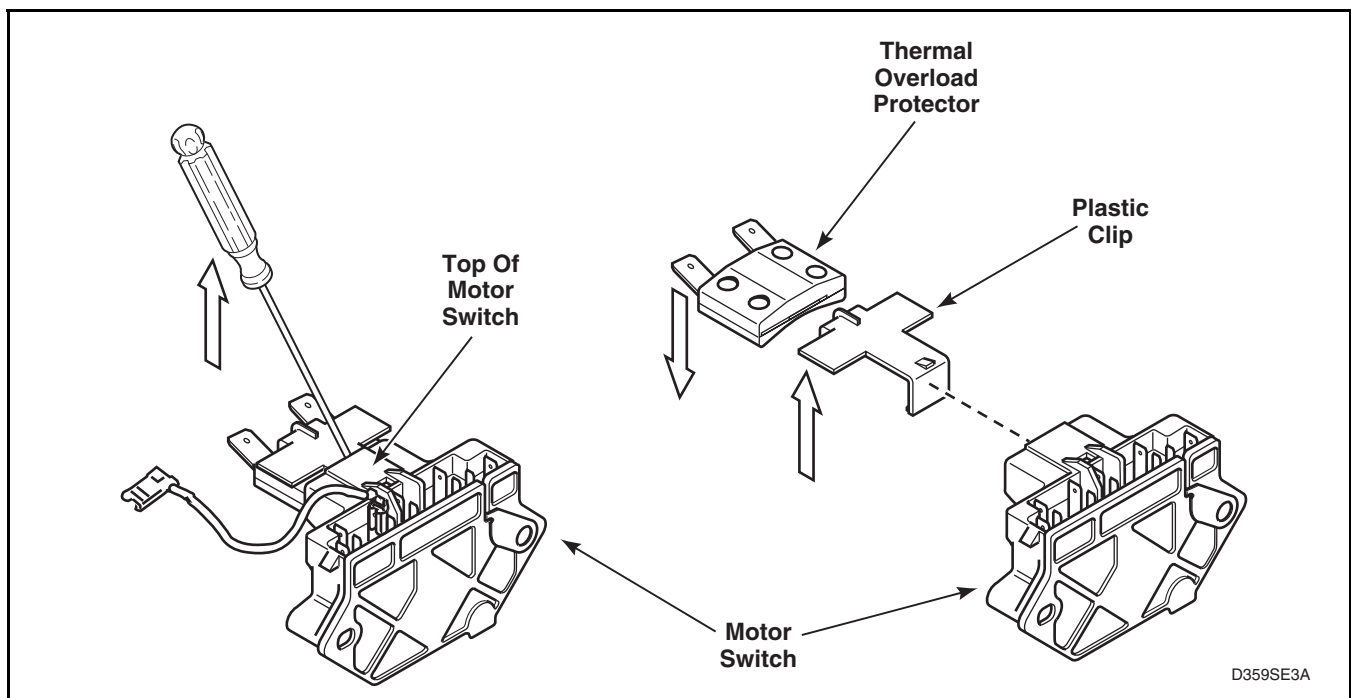
(2) Motor with switch on pulley end

Press the tip of a small bladed screwdriver into the slot located between top of motor switch and plastic clip. Lift up on handle of screwdriver until both clip and thermal overload protector detach from motor switch. Refer to *Figure 7*.

- Attach the thermal overload protector removed in Step "c" to the new motor switch.
- Install new motor switch onto motor and reconnect motor switch leads removed in Step "b". Refer to *Figure 10*.

- Test motor switch by following the step-by-step procedures included in *Paragraph 23*.
- Before reinstalling the motor assembly, apply power (120 VAC) directly to motor terminals 4 and 5. Then start and run the motor at least 6 times, making sure the motor and switch are operating properly.

NOTE: The dryer manufacturer and parts suppliers are not liable for improper switch installation.



D359SE3A

Figure 7



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1

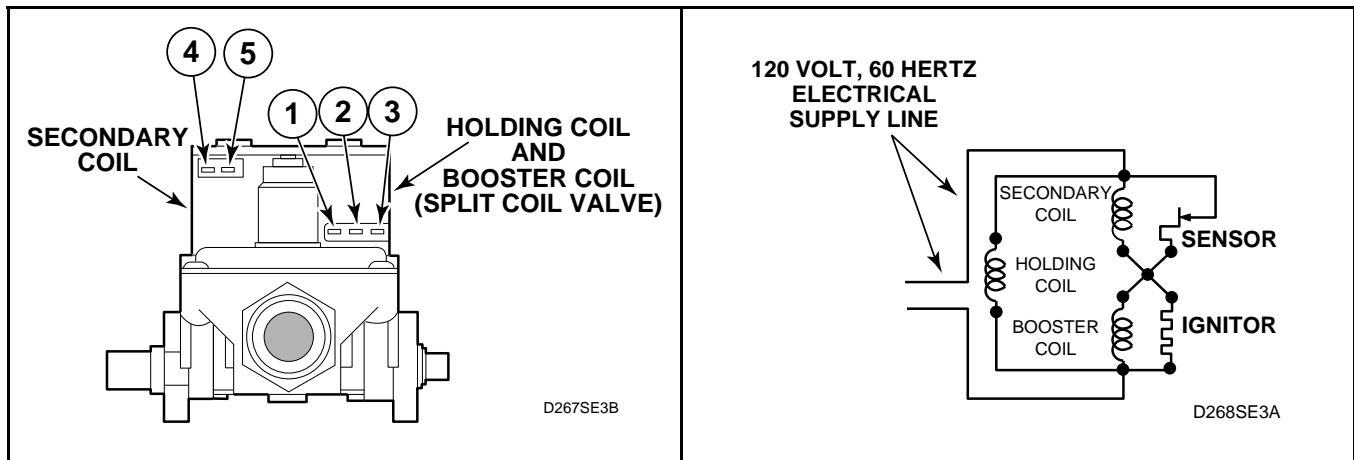


Figure 8

25. BURNER SYSTEM OPERATION

(Gas Models – Refer to *Figure 8*.)

a. Components

This burner has four basic components: a silicon carbide (glow bar) igniter, burner tube, sensor, and a two-stage gas valve consisting of a split-coil valve and a secondary coil valve. The split-coil valve is opened when the dryer thermostat calls for heat, while the secondary valve does not open until the igniter has attained ignition temperature.

b. Pre-Ignition Circuits

When the dryer thermostat calls for heat, circuits are completed through the holding coil, sensor, booster coil and igniter. Both coils must be energized to open the split-coil valve. Once opened, the holding coil can hold the valve open without assistance from the booster coil. The sensor triggers the current to travel around the secondary coil and through the igniter, causing the igniter to get hot.

c. Burner Circuit

In approximately 30 seconds, the igniter attains ignition temperature and ignition is made. The heat from the burner flame causes the sensor contacts (located on burner housing beside the igniter) to open. A circuit is then completed

through the secondary valve coil, opening the valve and allowing gas to flow.

d. Momentary Power Interruption

Upon resumption of power, sensor contacts will still be open, permitting secondary valve to open. However, with the secondary coil in the circuit, the booster coil cannot draw enough current to open the split-coil valve. When sensor contacts do reclose, the secondary valve will close, and the burner system will be in the normal pre-ignition circuit.

e. Flame Failure

In case of flame failure, the sensor contacts will re-close in about 45 seconds. This will close the secondary valve and the burner system will be in the normal pre-ignition circuit.

f. Ignition Failure

If flame is not established as sensor contacts open, secondary valve will remain open until sensor contacts re-close. Sensor will continue to recycle the igniter and secondary valve (about once per minute) until ignition is made or dryer is turned off.

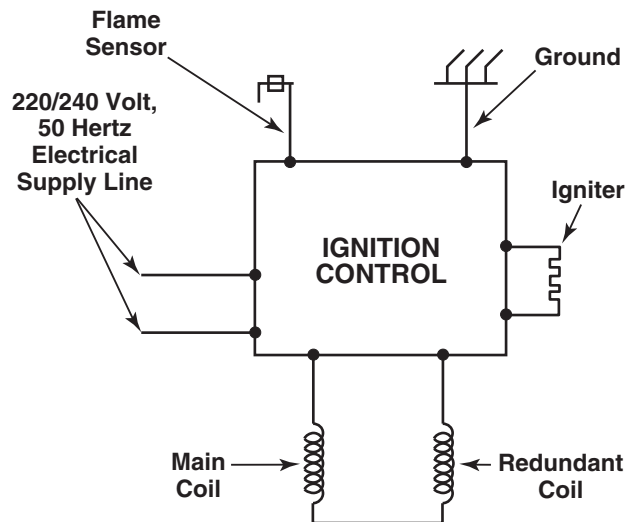
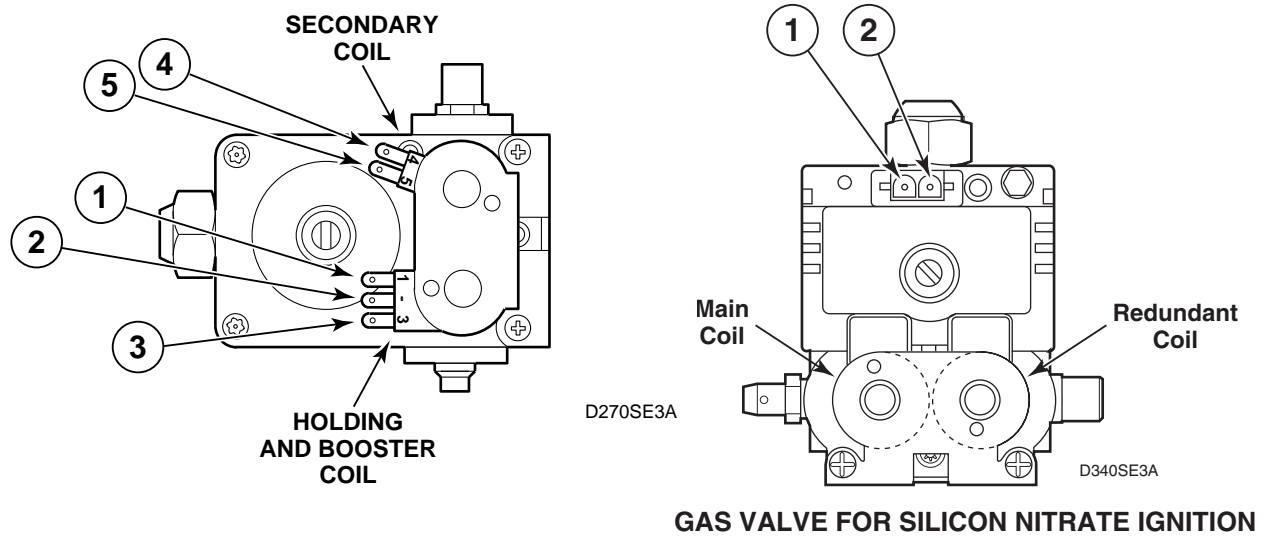


WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

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WIRING SCHEMATIC

D332SE3A

Figure 9



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer(s) before servicing.**
- **Close gas shut-off valve to gas dryer(s) before servicing.**
- **Never start the dryer(s) with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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26. ELECTRICAL CIRCUIT TO IGNITION SYSTEM (Gas Models)

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Close main gas shut-off valve. Refer to *Figure 3*.
- d. Remove valve wire harness disconnect block from the holding and booster coil. Refer to *Figure 9*.
- e. Plug dryer power cord into wall receptacle, and start the dryer in a heat setting (refer to the Operating Instructions supplied with dryer).
- f. Set test meter to read AC voltage and apply meter probes into terminals on the dryer harness plug that would correspond to terminals "1" and "2" on the coil. *Figure 8*. Meter should register line voltage in all Fabric settings, except NO HEAT/AIR FLUFF which should read "zero" VAC.
- g. If meter does not read line voltage in step "f", check motor switch, thermostats, fabric switch, accumulator, or timer.



WARNING

To reduce the risk of fire, explosion and electric shock, close the valve in the gas supply line to the gas dryer and disconnect the electrical power unless gas or power supplies are required to perform test procedure.

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27. GAS VALVE COILS CHECK (Gas Models)

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Close main gas shut-off valve. Refer to *Figure 3*.
- d. Remove disconnect blocks from gas valve coils.
- e. Set test meter to read Ohms and put meter probes to terminals shown in *Figure 9*, and in the following chart.

Silicon Carbide Ignition:

COIL TOLERANCE READINGS

Meter probes to terminals:	Meter should read:
Holding Coil – Terminals 1 & 2	1700 ± 285 Ohms
Booster Coil – Terminals 1 & 3	685 ± 115 Ohms
Secondary Coil – Terminals 4 & 5	1680 ± 285 Ohms

Silicon Nitride Ignition:

Both coils should read between 2400-2800 Ohms.

NOTE: If meter registers any other readings than those listed above, the respective coil(s) should be replaced.



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer(s) before servicing.**
- **Close gas shut-off valve to gas dryer(s) before servicing.**
- **Never start the dryer(s) with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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28. SENSOR CHECK (Gas Models)

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Close main gas shut-off valve. Refer to *Figure 3*.
- d. Remove wires from sensor terminals. Refer to *Figure 20*.
- e. Set test meter to read Ohms and put meter probes on sensor terminals. Meter should read “zero” Ohms. If meter registers an Ohm reading of any amount, replace sensor.

29. IGNITER CHECK (Gas Models)

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Close main gas shut-off valve. Refer to *Figure 3*.
- d. Disconnect igniter wires at disconnect block.
- e. Set test meter to read Ohms and put meter probes on terminals of igniter wires.
- f. **Silicon Carbide Igniter:** Meter should read between 45 – 200 Ohms.
Silicon Nitride Igniter: Meter should read between 49 – 88 Ohms.

NOTE: If meter does not read appropriate Ohms, then replace the igniter.

IMPORTANT: Always examine all wires, terminals and connectors to be sure wiring is correct before replacing any components.

30. IGNITION CONTROL GROUNDING CHECK (Silicon Nitride Ignition)

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Close main gas shut-off valve. Refer to *Figure 3*.
- d. Remove wires from sensor terminals. Refer to *Figure 20*.
- e. Set test meter to read Ohms and put meter probes on the ground wire connection in 12-pin block (connected to module) and on the green ground screw in base of dryer.
- f. Meter should read “zero” Ohms. If meter registers an Ohm reading of any amount, check ground wire connection and replace as necessary.

31. THERMAL FUSE (Electric Models)

- a. While supporting the access panel, remove two screws from bottom edge of front access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage panel locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Label and disconnect wires from thermal fuse. Refer to *Figure 22*.

NOTE: Refer to wiring diagram when rewiring thermal fuse.

- d. Set multimeter to read Ohms. Apply meter probes to thermal fuse terminals. Multimeter should read 0 Ohms. If the meter does not show any reading (infinite Ohms), then the fuse is open. If the fuse is open, then replace BOTH the thermal fuse and the limit thermostat.



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- **Disconnect electric power to the dryer(s) before servicing.**
- **Close gas shut-off valve to gas dryer(s) before servicing.**
- **Never start the dryer(s) with any guards/panels removed.**
- **Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.**

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32. HEATER ASSEMBLY (Electric Models)

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage panel locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Disconnect wires from heater assembly. Refer to *Figure 22*.

NOTE: Refer to wiring diagram when rewiring heater assembly.

- d. Set meter to read Ohms. Apply meter probes to the heater assembly terminals. Refer to *Figure 22*. Meter should read as follows: (Cold Ohms).

Heater Element Color Code	KW	Voltage/Hz.	Resistance Reading
Red	5	240 V 60 Hz.	10.39 ± .31 Ohms Cold
White	4.75	208 V 60 Hz.	8.2 ± .5 Ohms Cold
Green	4.8	240 V 50 Hz.	10.75 ± .32 Ohms Cold
Yellow	4	240 V 50 Hz.	13.03 ± .39 Ohms Cold
Blue	3.1	240 V 50 Hz.	16.7 ± .5 Ohms Cold
Orange	5.35	240 V 60 Hz.	9.72 ± .3 Ohms Cold
Purple	4.25	208 V 60 Hz.	9.27 ± .3 Ohms Cold

33. CYCLING OR LIMIT THERMOSTAT

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage panel locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Label and disconnect wires from thermostat. Refer to *Figure 22*.

NOTE: Refer to wiring diagram when rewiring thermostat.

Cycling Thermostat (S.P.S.T. – 2 Terminals) or Limit Thermostat

- d. Set meter to read Ohms.
 - (1) Apply meter probes to the thermostat terminals.
 - (2) Meter should read “zero.”

34. DOOR SWITCH

- a. While supporting the access panel, remove two screws from bottom edge of access panel. Refer to *Figure 8*.
- b. Gently lower the access panel to disengage locators from bottom edge of front panel. Refer to *Figure 17*.
- c. Remove two screws holding bottom tabs on front panel to dryer side panels. Refer to *Figure 9*. Swing bottom of front panel away from dryer far enough to disengage hold-down clips and locators from cabinet top.
- d. Disconnect wires from door switch. Refer to *Figure 16*.

NOTE: Refer to model wiring diagram when rewiring door switch.

- e. Set meter to read Ohms and apply meter probes on switch terminals 1 and 3 with door closed. You should get “zero” reading.
- f. Apply probes to terminals 1 and 2 with door closed. The meter should read “infinite”.
- g. Open door. Meter should read “infinite” between 1 and 3 and “zero” between 1 and 2.

Section 6

Internal Wiring of Dryer Motor Switch



WARNING

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the dryer(s) before servicing.
- Close gas shut-off valve to gas dryer(s) before servicing.
- Never start the dryer(s) with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the dryer is properly grounded.

W001R1

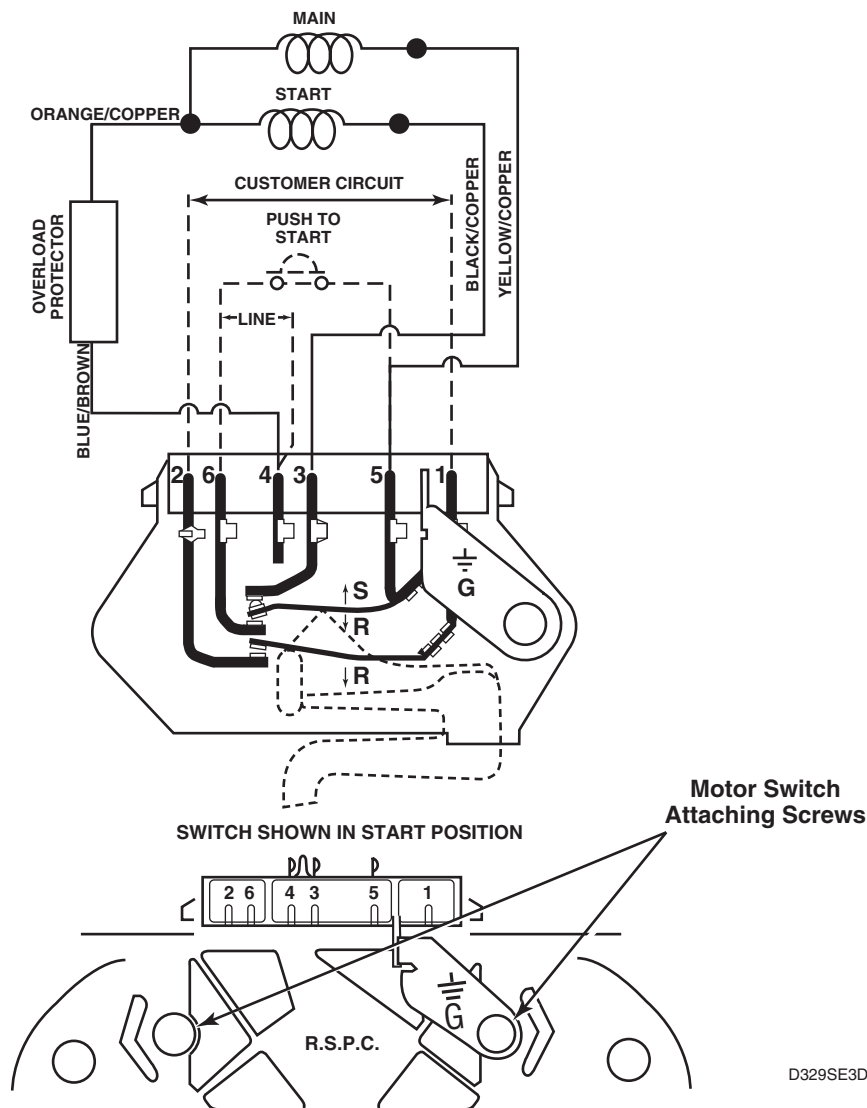


Figure 10